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**COSMOS
FIESTA**

Highest Award
1952 All-America
Selections

BROWNING'S GARDEN ANNUAL

WITH THE COMPLETE HOME GARDENING GUIDE FOR 1952

GEO. T. BROWNING CO.



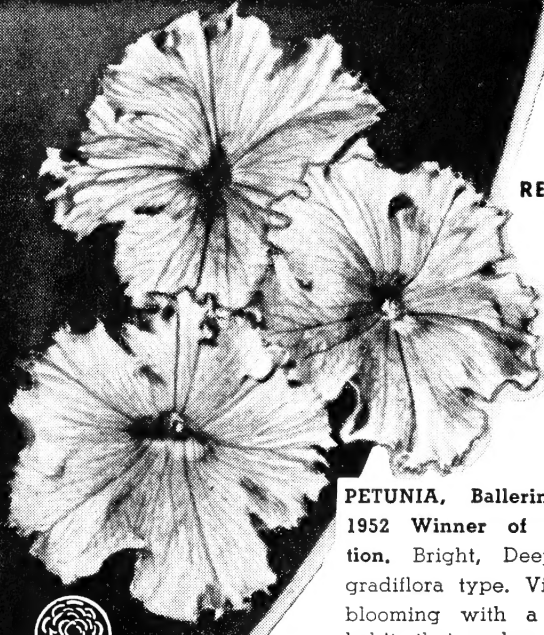
613 MONROE STREET

TOLEDO 4, OHIO

FLOWERS—WHAT'S NEW IN '52

ALL AMERICAN WINNERS and EXCITING NOVELTIES

**BE FIRST WITH
THE LATEST
RECOMMENDED FOR GARDENERS
WHO STAY A STEP AHEAD**



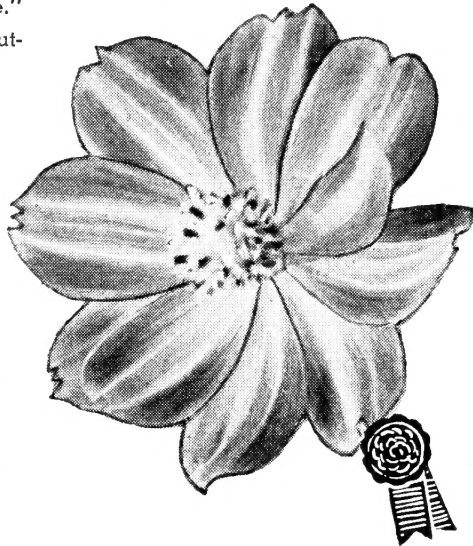
PETUNIA, Ballerina—All-American, 1952 Winner of Honorable Mention. Bright, Deep Rose fringed gradiflora type. Vigorous and free blooming with a rather compact habit that makes it adaptable to both garden and pot culture. Flowers are delicately fringed and very attractive. Interesting variability in throat color from dark to light. A first generation hybrid. **Packet 50c.**



ZINNIA, Persian Carpet—Winner of 1952 All-American Honorable Mention. Rich deep tones of red and gold along with sunset shades will make this a true garden surprise to flower lovers. The mixed colors of Persian Carpet aptly names this new addition to the zinnia family. Extremely easy to grow with medium-sized blooms on good cutting stems. Does well almost anywhere. **Packet 25c.**

SCABIOSA, Coral Moon (below), New coral shade of the "Pincushion Flower" or "Mourning Bride." Large double flowers on firm cutting stems. **Packet 25c.**

WINNER HIGHEST AWARD 1952 ALL-AMERICAN



COSMOS, Fiesta—(above), Silver Medal Award of All-American Selections Jury. A bi-colored cosmos, the first of its kind! Orange colored petals with scarlet longitudinal stripes. Bushy plants grow quickly to 2½-foot height. Fiesta plants are prolific and extremely early flowering, 2-inch daisy-like flowers on wiry stems. Useful for late planting after spring flowering bulbs. **Packet 25c.**

ASTER, Wilt Resistant Super Giant, Mixed. An entirely new class of base branching, heavy stemmed, big, fluffy ostrich feather flowers. **Packet 25c.**



ZINNIA, Peppermint Stick—(left) Mixed. One of the most interesting novelties in years! A carnival of striped flowers in wide color ranges. Red and white, red and yellow, pink and white, orange and yellow, etc. Produces approximately 70% striped flowers. **Packet 25c.**

TITHONIA, Torch — (right) All-American 1951 Silver Medal Winner. Fiery Scarlet Annual. Bushy, 4-foot high plants with profuse 4-inch single flowers. Compact, upright. **Packet 25c.**



'52 IS THE YEAR TO DO!

TRY NEW VEGETABLES

TRY NEW FLOWERS

NEIGHBOR, WHAT CAN WE DO TO HELP THIS YEAR?

To help you toward a successful garden this year we have devoted nearly half of our Garden Annual to "how to do it" information. It will pay you to save it as a year-'round reference book, for here is a different kind of seed catalogue.

Just as one good neighbor to another we're interested in your garden. We have a pretty close insight into your garden needs and preferences. We take them seriously and personally. Long acquaintance with this section, the soil, the climate, the growing conditions, qualify us to help you as no "far distant" house can.

In these pages as in our store, you'll find the answer to most of your gardening needs. Good seeds in ample variety—garden supplies of all kinds. One excellent reason why you should use the services of a store like ours is the **COMPLETENESS** of our service. As seed professionals, we know what you'll need at every step of the way. That's why it's so satisfying to shop here for garden supplies.

We want all your gardening efforts to be successful, and we try to do all we can to make them so. As "Garden Headquarters" we feel that's part of our job!

We're here the year 'round, and always ready and willing to aid in every way we can. Bring in your garden problems, talk them over, and get good practical suggestions backed with local know-how. May we help you?

FOR A MIRACLE —A FEW CENTS

Can you think of anything money can buy that's quite such a bargain as Seed? Wholesome food for meal after meal . . . fresh, crisp healthful fare that no market can match—and flowers with beauty unlimited that bring long hours and days of delight—all for a few cents! What else gives you so much for so little as a packet of seed?

Seed isn't mere merchandise. It is a miracle in a small packet! It is without question the greatest bargain any merchant could offer you.

LIMITED WARRANTY: Our Company warrants to the extent of the purchase price that seeds or bulbs sold are as described on the container within recognized tolerances. Seller gives no other or further Warranty, express or implied.



This Year, More Than Ever-Grow Your Own With a Money Saving Liberty Garden!

That's what they're calling them this year, Liberty Gardens—seems but a short while since we had Victory Gardens doesn't it? The emphasis now on this nation-wide program is to garden not only for immediate use, but for storing, canning, preserving and freezing food for winter and emergency uses, too.

Seems to be a lot of good, plain, old-fashioned American sense behind the idea. First of all, with present high living costs, growing your own can mean **important economies** in a great many of those necessary items on the food budget.

Too, home gardening is a **profitable**, healthful way to utilize leisure time. The conversion of free time into productive use in the garden is like getting an equivalent in higher wages plus the added pleasure of having food on the table that is crisply fresh, more tasteful and vitamin rich.

We always work with the **needs** of our own neighbors gardens in mind. We know local gardening problems—that's our business. Our stocks of seed and supplies are carefully selected to meet local requirements for Liberty Gardens. Won't you come in and pay us a friendly visit soon? If you're interested in "growing," you'll find ours is the best place to stop—in the long run you'll save time, labor and money, too.

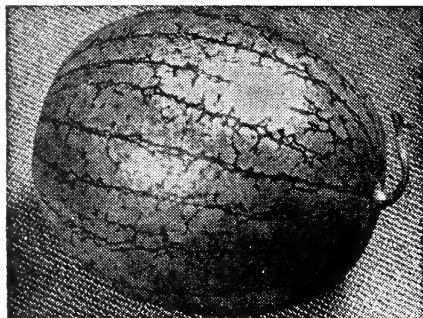
PRICES: All prices in this catalog are subject to change without notice.

MAIL ORDERS: On mail orders, all packet seeds are sent postpaid. On all other items, add parcel post charges to your remittance.

—Your Local Seedsman

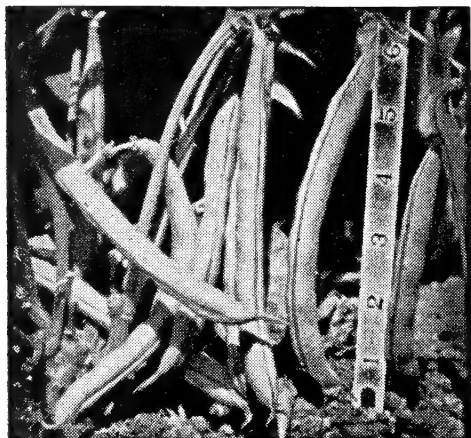
BROWNING'S

SUGGESTIONS FOR SOME OUT-OF-THE-ORDINARY GARDEN FARE



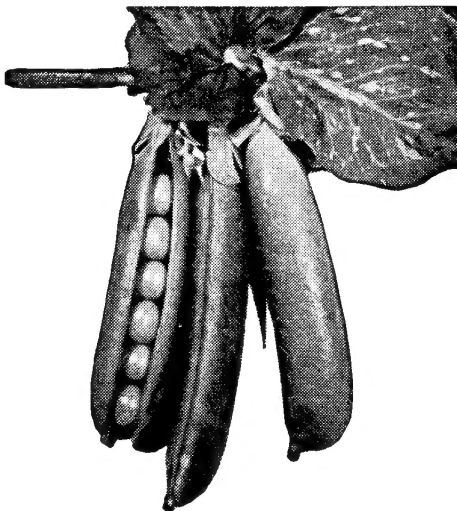
TASTY WATERMELON — REFRIGERATOR SIZE!

New Hampshire Midget Watermelon—A little beauty, chock-full of strawberry-red flesh of fine flavor. Grows on a small vigorous vine. Contains large black seeds for its size. Has been recommended where large size watermelons do not mature satisfactorily. 78 days. **Packet 15c.**



A SUPER BUSH BEAN!

Topcrop Bean—This excellent bush bean won the All-America selections Gold Medal two years ago. It is considered one of the outstanding horticultural developments in recent years. 5½ to 6 inches long, round medium light green pods. **Packet 15c.**



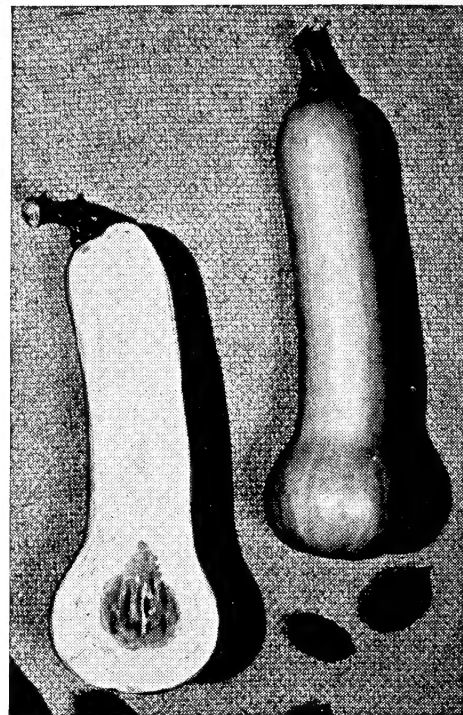
PEAS FOR FREEZING

Freezonian Pea—Luscious melting peas that retain their garden fresh flavor after quick freezing. Vigorous 2½ foot wilt resistant vines bear 3½ inch well-packed pods of excellent quality peas. Outstanding suggestion for the home garden. 63 days. **Packet 15c.**



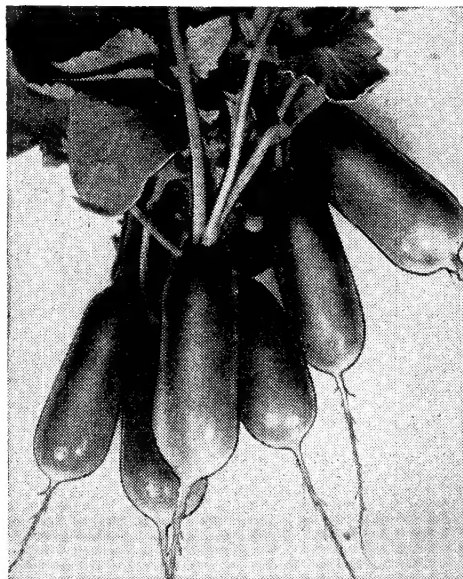
DEEP KERNELED CORN

Iochief Sweet Corn—A yellow F₁ hybrid with sensational qualities. Sugar sweet and tender. Stays prime longer. Has rich golden color. Large ears with deep kernels. Rigid, rugged stalks with luxuriant heavy foliage. A Gold Medal Award Winner for 1951 that received 69 points from the judges when only 60 are required for this honor. **Packet 15c.**



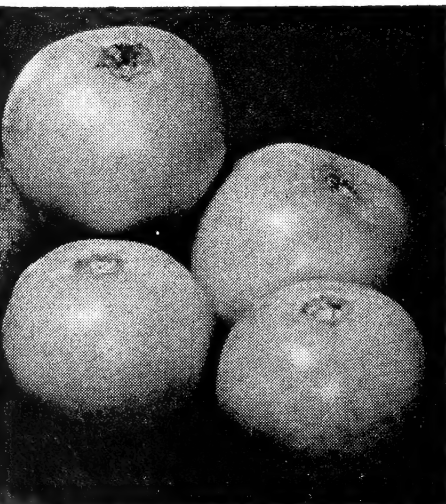
DELICIOUS SQUASH WITH MORE MEAT — LESS SEED

Butternut Squash—Dry sweet yellow flesh of superb texture and excellent flavor. Here is an unusual garden novelty. Butternut has only a small seed cavity. Is tasty baked or boiled. Easily grown and a good keeper. **Packet 15c.**



SPEEDSTER RADISHES

French Breakfast—A fast growing radish with a rose-scarlet skin shading to clear white in the lower portion. White crisp flesh that is mildly pungent and tender. Has very short tops and radishes show partly above the ground. Has oblong to deep olive shape. Should be the first item available to pick in your Liberty Garden. 23 days. **Packet 10c.**

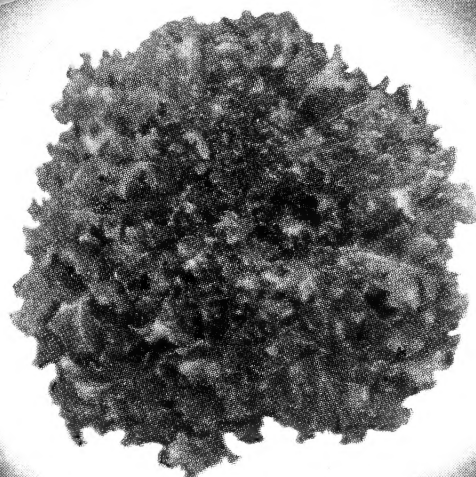


A TOMATO OF GOLD

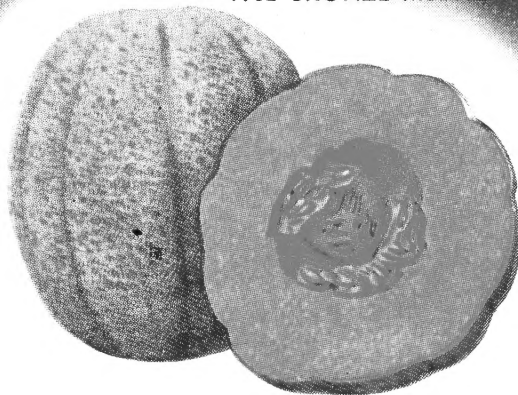
Jubilee Tomato—A bright golden orange, deep globular shaped tomato that grows about 2½ by 3 inches in size. Has a mild delicious, definite flavor that is free of acidity. Is excellent served alone or along with red varieties. Jubilee is thick walled and has relatively few seeds. You'll be surprised at the fine eating quality of Jubilee. **Packet 10c.**

Vegetable Seeds

LETTUCE,
Salad Bowl
1952 GOLD MEDAL



MUSKMELON,
Golden Delight
1952 BRONZE MEDAL



CAREFULLY SELECTED FOR GROWING QUALITIES RIGHT HERE IN OUR TERRITORY

From among all the thousands of available varieties, we have selected those which will produce the best quality and the greatest yields in the gardens of our territory. So we offer you this compact selection as a safe, sound base for your plans.

VEGETABLES FOR FREEZING—The symbols (fr) following the variety names indicates vegetables suitable for home freezing.

ASPARAGUS

A hardy perennial; will bear over 20-year period if properly cared for. We recommend purchase of ASPARAGUS ROOTS rather than seeds, as roots produce crop 2 years earlier. If seed is used, sow thinly in drills in early Spring. Cover to 1/2" depth. Soak seed 24 hrs. before planting. Sow in loose, rich, moist soil after weather warms up. Thin to stand 6" apart. When a year old and in early spring transplant in well enriched beds in permanent position, 24" apart, in rows 20" apart. Set in hole so that crown is 8" below surface, but only cover tips with 3" of soil. As plants grow, fill in until level. Don't cut first year after setting.

MARY WASHINGTON (fr) — Thick, tall green spears with purple tops. Highly rust resistant. Rapid growing. Tender.

BEANS

For "HOW TO GROW" see Next Page
Large Packet 15c

Green Podded, Dwarf or Bush

BLACK VALENTINE STRINGLESS (fr) — Hardy, early maturing, very productive. Pods, dark green, 6-6 1/2 in. long, brittle, smooth, stringless. Seeds black. Matures in 49 days.

BOUNTIFUL (fr) — An early, heavy-yielding variety. The leading flat podded bean for market and home use. Flat, light-green, stringless, but slightly fibrous pods of finest quality. 47 days.

STRINGLESS GREEN POD (fr) — Large, sturdy plants. Meaty round pods, brittle and strictly stringless. Medium green pods, oval, yellowish-brown seed. 54 days.

GIANT STRINGLESS GREEN POD — 5 3/4" pods almost round. Meaty, stringless and brittle. Medium. Green. 53 days.

PLENTIFUL — Productive, early. Flat. medium green pods, 6 to 7-in. long, strictly stringless. Choicest quality. All-America Medal, 51 days.

TENDERGREEN (fr) — Large, erect plants. Abundant, round, dark-green pods, strictly stringless and fleshy. 54 days to maturity.

WADE'S BUSH SNAP BEAN — All America Gold Medal winner for 1952. Resistant to common bean mosaic and powdery mildew. Deep green pod, long, round, slender with reddish brown seed.

MARKETER — Dark green skin. 8 in. long. Slender, smooth, slightly tapered. Thick crispy flesh. 65 days.

TOPCROP — Does well in the home garden, market garden and is excellent for commercial processing. 5 1/2 to 6 inches long. Round, medium light green pods. Pkt. 1/2 lb. 45c. 51 days. All America Gold Medal winner 1950.

Wax Podded, Dwarf or Bush

IMPROVED GOLDEN WAX (fr) — Small, erect plants, moderately productive. Straight, thick, flat pods, creamy yellow and stringless. 51 days.

PENCIL POD BLACK WAX (fr) — Stocky, large, strongly productive plants. Pods, golden yellow, tender, stringless. 55 days to maturity.

SURE CROP STRINGLESS — Handsome, rich yellow pods. Sturdy, brittle. 6-6 1/2 in. long. Strictly stringless. 53 days.

Beans, Pole

LONDON HORTICULTURAL OR CRANBERRY — Hardy, good climber. 5" pods flat-oval, dark green when young, splashed with red. Slightly curved, stringless, little fiber and very fleshy. 70 days.

KENTUCKY WONDER WAX (fr) — Vigorous, good climbing plants waxy-yellow pods, flat and nearly stringless. Somewhat fibrous but meaty. 68 days.

KENTUCKY WONDER (fr) — Strong climber, hardy, long-bearing. Curved, almost round pods. Slightly stringy, but brittle and fibreless. Meaty. 65 days to maturity.

Lima, Dwarf or Bush

BURPEE'S IMPROVED BUSH (fr) — Best of flat seeded bush limas. Pods contain four or five large beans of excellent quality. 75 days. Pkt. 15 cents.

FORDHOOK BUSH (fr) — Straight pods with plump, large beans, excellent quality.

HENDERSON'S BUSH (fr) — Known as Baby Lima or Butter Bean. Plants small, early and bushy. 65 days. Very productive.

Lima, Pole

Follow same plan as for other pole beans but plant seed two weeks later.

KING OF THE GARDEN (fr) — Flat, smooth pods with four or five white, large, flat beans. 88 days.

BEANS, SHELL

NAVY — Small seed, almost round and white. Hardy, prolific. Most popular for baking. 95 days.

RED KIDNEY — Pods 6-7 in. long. Flat large beans, pinkish red to mahogany in color. Rich flavor. 95 days.

ALL VEGETABLE SEEDS

10¢ PER PACKET

UNLESS OTHERWISE NOTED

BEETS

Deep, rich sandy loam produces finest beets. As soon as ground can be worked sow in drills 18" apart and press soil firmly over seed. Each "seed" is a fruit with several true seeds. No matter how thinly beets are sown, they will need thinning. Make three sowings, one early, one three weeks later and one 60 days before fall. When tops are 3" to 6" tall pull them and use for cooked greens. Continue this until roots stand 6" apart.

CROSBY'S EGYPTIAN (fr)—Widely grown for early beets. Flattened globe shaped roots with small tap root. Excellent quality, tender and sweet. 60 days to maturity.

DETROIT DARK RED (fr)—Standard of excellence in table beets. Smooth, globular roots of deep ox-blood red—sweet and tender. 68 days.

EARLY WONDER—Early variety. Semi-globular, tender, blood-red. 58 days.

BEETS, STOCK (Mangel Wurzel)

Sow seeds in early fall and spring in rows. Plant 2½" to 4" apart. Later thin to 10" apart.

MAMMOTH LONG RED—Very popular, 30 to 50 tons per acre. Roots grow half above the ground. Light red, flesh white with rose tinge. 110 days.

BROCCOLI

Plant and cultivate like cabbage and cauliflower.

ITALIAN GREEN SPROUTING (fr)—Plant bears a succession of sprouting heads about 5-in. long, which, if kept cut, will be replaced by others 8 to 10 weeks. 55 to 65 days.

BRUSSELS SPROUTS

Easy to grow wherever conditions are favorable for late cabbage, and requires same culture. As sprouts begin to form remove lower leaves so that all nourishment sent to lower stem will be forced into the sprouts. Do not use until after heads have matured.

LONG ISLAND IMPROVED—Compact, uniform dwarf size plants. Cabbage-like sprouts 1½" to 1½" in diameter. One of the most dependable varieties. Edible in 90 days.

SWISS CHARD

Requires about same treatment as beets. Cultivate frequently. Leaves may be gathered during summer and fall. New ones will grow quickly.

LUCULLUS—Most popular Chard. Upright in growth, with yellowish-green curled, crumpled leaves. Thick, broad and light green stems. 50 to 60 days.

RHUBARB CHARD — Heavily crumpled leaves, dark green with a translucent crimson stalk. Easily grown, everywhere. A different, tasty, delicious flavor—cook stalks and leaves together for a new taste thrill. 60 days.

CABBAGE

Sow seed in drills 6" apart across the bed, dropping the seed 5 to 6 to the inch. Firm soil after covering, then water thoroughly. Keep beds moist but not soaking wet. Seed germinates 3 to 8 days depending on temperature. Transplant to open ground when plants have made fourth pair of leaves. Space 12" x 24". Use plenty of good commercial fertilizer. Cultivate frequently, every 5 or 6 days until cabbages are large.

Yellows Resistant Varieties

YELLOW RESISTANT MARION MARKET—Large, firm round heads, used for early kraut. A development from Copenhagen Market. 7-in., 4-lb. heads. 75 to 80 days.

YELLOW RESISTANT WISCONSIN HOLLANDER—Late, excellent for winter storage and kraut. Similar to Hollander and Danish Ball Head. 7 to 8-in., 7 to 9-lb. heads. 100 to 110 days.

(Continued on next page)

how? when? HOME GARDENING GUIDE where? why?

This year we've tried to make our Garden Annual a pocket gardening encyclopedia in the shortest and simplest form possible. As neighbors we want to be helpful so we've crammed our book full of gardening facts above all else. Down to earth information all gardeners want—the things they keep asking about year after year.

Most of your questions can be answered by referring to the information contained in the section with the Home Gardening Guide headings like the one above. Even old timers will find these notes worth saving for the many items that every gardener needs from time to time.

HOW TO GROW BETTER BEANS

Bush Beans

Don't plant until the weather is warm and settled.

Sow beans in bottom of furrow, 3" to 4" deep and from 2½ to 3½ feet between rows, but do not fill in with more than 1½" of soil over seeds. Press soil firmly over seeds, but do not pack hard. Thin to stand 4" to 6" apart in row. Bean seedlings are likely to be slowed up pushing through heavy soil. In such soils, cover seeds with mixture of half sand and half soil, or sand and peat or any other loose, light material that will allow seedlings to break through easily. Thin young plants to about 6" apart. Keep cultivated until plants blossom. (DO NOT CULTIVATE when blossoms are at prime or when plants are wet with dew. Keep vines picked to insure a larger bearing period.) Make plantings every two weeks for supplies throughout the season.

— Two scientific facts about beans will help produce better crops. First, being legumes, they should be inoculated with special legume culture listed in supply section. This enables plants to manufacture their own nitrogen from the air. Second, bud drop of the tiny flowers (even before they can be easily seen) cuts the early set of pods. By spraying with

a fruit setting spray these buds are held on and the early crop increased by as much as 100 per cent.

Growing Pole Beans

In warm ground, set poles 4' to 8' long slanting a bit to the north in rows 4' apart. (Extending north and south the poles will be 8' apart in the row.)

Anchor well as heavy beanvines blow over easily.

Plant 5 to 8 beans about 1" deep around each pole. When growth is sufficient thin to four plants.

Sometimes three poles set to form a tepee are used and several seeds planted around each tepee.

Caution: To avoid spreading plant diseases, do not cultivate or pick when plants are wet.

Lima Beans

Plant in dry, warm ground. Make rows 2' apart and drop beans 5" apart in row. Plant Lima Beans with the eye down to assist quick germination. Cover with 1" of soil. Can also be planted in hills, 3" apart one way and 2' apart the other way. Use 4 to 6 beans per hill.

"Beans an Important Crop," says Old Gardener



Beans rank with tomatoes and sweet corn as one of the three most popular garden crops. We're a mite partial to those Baby Limas at our house both for freezing and sheer good eating luxury.

Even those who don't care much for beans would change their minds if they could eat them at their best—young, tender pods cooked within a few hours after picking.

It pays a home gardener to know some facts about this nutritious food crop, which yields more food for the space occupied than most other vegetables.

Beans are the most adaptable crop we have. You can always squeeze in a crop if you have sixty days of growing weather before frost. The plants can be kept producing over

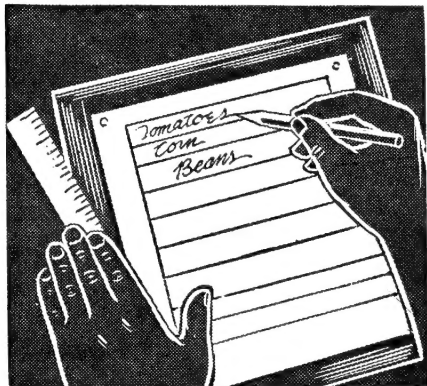
a long period, if you'll pick them clean. You'll get more beans per square foot (and better beans) by starting a short row every two or three weeks. When you make these succession plantings, don't forget to plant a generous row for canning or freezing.

Pole beans are the heaviest yielders of the family. They are later in season and more tender to cold than bush beans. They should not be planted until the weather is settled and the ground warm. They must be provided with wire or cord to climb, and planted at least six inches apart. Be sure to enrich the soil for beans by applying at least four pounds of plant food for each 100 feet of row.

If pods are kept picked so that seed is never matured, the plants will continue to bear as long as they remain vigorous and green. So almost twice as large a yield can be enjoyed, if all pods are harvested when they are at their best, for cooking, canning or freezing.

how? when? HOME GARDENING GUIDE where? why?

TO START YOUR GARDEN "First Take A Pencil"



Getting the most food of the best quality with the least amount of time and labor, starts right at the planning stage of your garden. Charting it out to scale on paper and keeping your chart as a year to year planning record helps you correctly rotate crops, as well as plan succession crops, catch crops and intercrops. You will save ground space, too, that means less weeding and watering to be done. Sit down and use the pencil and you save standing up and using the hoe.

On page 17 of our Garden Annual is a comprehensive guide that will give you all the information you need to plan your garden on paper. The amount of seed required, spacing between seeds and rows, the growing period and the approximate yields are all shown in this guide.

The best procedure is to start with a very rough sketch. Try all your ideas in combinations during this rough sketch stage. When you have what you want, convert your rough sketch into a final plan, drawn to scale. A scale of one quarter of an inch representing one foot works very well, because by using one sixteenth of an inch as three inches, almost any standard spacing of the rows can be shown in exact scale.

Divide the garden into three sections if possible, (1) Root vegetables (2) Leaf vegetables and (3) Fruit vegetables. By switching these three groups every year you avoid many soil-borne diseases and insects and get better use of fertilizers. This isn't absolutely necessary, but it is one of those details that the smart gardener watches.

High growing vegetables such as sweet corn, pole beans and staked tomatoes should preferably be on the north side of your garden, otherwise they will ultimately cut off the life-giving sunlight from your lower growing vegetables. Your sweet corn area is better planned if it is grouped in a square rather than a long row or two. This insures better and easier pollinization. Crops that remain in the garden throughout the entire growing season should be located where they will not be disturbed.

Early crops should be planted together. When they are harvested, the space can be used again for fall crops.

Successive cropping should be practiced in every garden. This may be carried out in two ways. One crop may follow another in the same season... late cabbage or sweet corn may be planted in the space from which early peas, beans, lettuce or radishes have been harvested. Or successive plantings of the same crop may be made at intervals of seven to ten days. This will provide a continuous supply of such crops as sweet corn string beans, spinach and radishes.

Companion cropping is also important. This is the growing of two or more crops on the same area at the same time. Quick maturing crops like spinach, beans, kale, lettuce and radishes may be planted between the rows or in the rows of eggplant, tomatoes, melons, okra or other crops that occupy the ground during the entire season. The early crops will have time to mature and be harvested before the later ones will require the entire space for full development.

With the plans complete, you are now ready to order your fertilizer, seeds, tools and insecticides. It is to your advantage to do this as early as you can. Late in the season many desirable varieties may be sold out.

CABBAGE—Continued Standard Early Varieties

COPENHAGEN MARKET—Excellent, early short season type. Short stems, 6½ in., 3½ to 4-lb. heads, 65 to 70 days.

GOLDEN ACRE—Extra early variety producing uniform well-balanced head. Weighs about 3 lbs. Excellent quality, 65 days.

Late or Winter Varieties

DANISH BALL HEAD OR HOLLANDER—A widely used late type. Deep, round, hard, compact heads, 7 to 8-in., 6 to 7-lb. Tender, crisp, fine for kraut, 100 to 105 days.

PREMIUM LATE FLAT DUTCH—The best late variety. Large, round, flat solid heads of perfect shape. Less inclined to burst than many varieties. Tender; fine quality.

Red Variety

MAMMOTH RED ROCK—Best of the red cabbages. Hard, round. Purplish-red heads. Good keeper, 6 to 8-in., 7 to 8 lb. heads, 100 days.

CHINESE CABBAGE

Must never be grown as a spring crop since it will only go to seed. Plant after June 15, as days are getting shorter, then it will head. An excellent succession crop to follow early peas.

CHIHILI OR IMPROVED PEKIN—Dependable, early. Solid, tapered heads, 3 to 4-in. thick, 18 to 20-in. long, 75 days.

CARROTS

CHANTENAY, RED CORED (fr)—Root has thick shoulder and tapers to slight stump root, 5-in. long. Red cored, 70 days to maturity.

DANVERS HALF LONG—Sweet, tender roots, 6 to 7-in. long tapering to a blunt point. Fine for storing, 75 days.

IMPROVED IMPERATOR (fr)—Fine-grained, tender. Rich orange, indistinct core. Roots smooth, tapered to semi-blunt, 77 days.

NANTES IMPROVED CORELESS (fr)—Excellent for forcing. Tops small, roots bright orange, blunt ended. Flesh reddish orange and practically coreless, 70 days.

OXHEART OR GUERANDE—Excellent for shallow soil, easy to harvest. Chunky, tender and sweet. Bright orange. Keeps well, 72 to 75 days.

CAULIFLOWER

PACKET, 25c

Needs rich soil and abundant watering. Cultivate same as cabbage but protect heads from sunlight to insure the prized white curd. This is done by gathering leaves together loosely as soon as heads begin forming, and tying them well at the top.

EARLY SNOWBALL (fr)—Best and most widely used early variety. Medium, firm compact heads of fine flavor, 6-7 inches in diameter, 55 days.

CELERIAC

LARGE SMOOTH PRAGUE—(Turnip rooted celery). Smooth spherical roots, 2 to 3-in. thick, 120 days.

CELERY

Start in shaded hotbed 60 days before needed. Cover seeds ¼". Transplant when 6" high. In setting outdoors, don't get soil in or over crown. Set 7" to 12" apart. Soil must be rich, moist and loose. As soon as plants have grown to 14" to 15" tall, set 12" boards on both sides of row and hold in place with earth. Or 4" drain tile can be used to blanch individual stalks. Celery must have warm, settled weathers. If chilled, plants are likely to go to seed. Keep soil well fertilized and moist. Crop matures in cool weather of autumn.

GIANT PASCAL—Late variety for winter use. Large plant, dark green leaves. Big solid stalks that blanch to yellow white, 135 days.

GOLDEN SELF BLANCHING, DWARF—Compact plants, yellowish green foliage. Broad solid stalks, nutty flavor. Blanches readily, 120 days.

WONDERFUL OR GOLDEN PLUME—Early, medium plant with compact, full heart. Blanches easily to golden yellow, 112 to 115 days.

"Use Those Carrot Thinnings," says Old Gardener



Carrots are a triple-treat crop—you can freeze them, store them or can them, in addition to serving them fresh. All three methods will save the delicious carrot sweetness for winter eating. Better have plenty for eating fresh, too, especially the finger-size thinnings from the row. Commercial growers throw these away but they're the choicest morsels the garden produces. The new coreless types are best for eating fresh, canning or freezing. They have less fibre, taste sweeter.

If you must store carrots in a cellar or outdoor barrel, you'll want something a little firmer, like Danvers Half Long. If your soil is stiff, stubborn clay, use Ox-

heart, which grows straight, while the longer kinds will corkscrew as they try to grow in clay.

Heavy, clay soils because of their density resist the downward growth of long, slender rooted vegetables. For instance, Emperor Carrots and Icicle Radishes will twist and bend to follow the lines of least resistance of growth in heavy soil. This unusual appearance is called "Corkscrewing" and it visually indicates lack of soil porosity and humus.

Sand added to heavy soil will assist in relieving density but it should be accompanied with peat moss or one of the new Vermiculite materials.

Peat moss is a selected, organic material formed years ago by the growth and decay of various aquatic plants. It, too, relieves soil density as well as supplying organic material and contributing to the formation of humus.

WHY IT PAYS TO SEE US FIRST FOR YOUR SEED REQUIREMENTS

Every item of garden seed in this book is good seed—the very finest quality to be had anywhere, at any price.

You may be able to buy your garden seed cheaper but you simply can't buy better seed than we offer here. Every lot is carefully and conscientiously selected from the best offerings of the best growers.

Another good thing about our seed is its fitness for this area. We know local soils and local weather conditions—and we select our seeds to meet those particular conditions. There are plenty of gardening risks you can't

avoid. So why take unnecessary risks? The seed business is a highly technical specialty. It demands years of experience—endless vigilance—constant contact with many markets. That's why only seed specialists can serve you safely.

We are seed specialists of long experience. Our business life depends upon the quality and honesty of the seed we sell you! Your garden future is safe in our hands! Drop in! Talk it over with us! Our knowledge and experience are at your command!

COLLARDS

Sow seed heavily and transplant when 4" high, or sow in rows in permanent beds and thin to 16" to 18" apart when plants are well started.

SOUTHERN OR GEORGIA—An excellent cooked green. Long stemmed plant, with clustered leaves. Withstands heat and bad soil. 24 to 36 days.

SWEET CORN

All Sweet Corn 15c packet

For the home gardener, the simplest way to plant sweet corn is in rows or drills, not in hill. Plant on north side of garden or so late summer shade from your corn does not retard growth of other nearby vegetables. Space the rows 36" apart, and plant a seed about every 3". Thin stalks to stand 9" to 12" apart in row. The drill should be 3" to 4" deep, but don't cover seed with more than 1" of soil. The drill or furrow can be filled in as the plants grow to anchor them against the wind.

In hills, plant 4 to 6 grains per hill. Later thin to 2 or 3 stalks to a hill. Space several plantings at intervals of 14 days for continuous crop.

Removing suckers has been standard practice with practically all growers. Now, experiments prove that removing suckers merely takes away extra food-producing leaves and so hurts rather than helps growth. Also, suckering often disturbs roots enough to injure plant. Always plant corn in several short rows side by side rather than one long row. Corn is pollinated by wind and rows side-by-side mean that all the stalks can be reached by the pollen. Many home gardeners, on reading newspaper accounts of corn de-tasseling, assume that this is necessary to set ears. On the contrary, removing tassels may cut the crop seriously. Detasseling is only done where hybrid corn is raised for seed purposes. The

more pollen that flies, the better the set of kernels. So don't detassel sweet corn in the home garden. If weeds are under control, stop cultivating. If weeds are bad late in the season, work the soil as shallow as possible to avoid injuring surface feeder roots.

Hybrids

We offer Hybrid Sweet Corn varieties known as the best for your garden—the finest that can be produced anywhere. We list here only a few of these choice kinds. Whatever your needs or your preference, be sure we can supply you with the kind of corn you want. Talk it over with us.

IOCHIEF—A yellow hybrid sweet corn with sensational qualities. Sugar sweet and tender—stays prime longer—rich color. All America Gold Medal Winner for 1951. Packet 15 cents.

GOLDEN CROSS BANTAM (fr)—Extremely uniform. Ears 10 to 14 rows, slightly lighter yellow than Golden Bantam. Highly resistant to Stewart's disease. 85 days.

IOANA (fr)—1940 ALL-AMERICA. Ears 7½ to 8-in., well-filled with 12 or 14 rows of deep, medium narrow, light yellow kernels. Highly resistant to drought and bacteria wilt. 87 days.

MARCROSS (fr)—An early wilt-resistant hybrid, producing deep golden yellow kernels 7 days earlier than Golden Bantam. Ears 6 to 7-in. long, with 12-14 rows of large sweet kernels. 73 days to maturity.

STOWELL'S HYBRID EVERGREEN—White. Large ears about 8-in. long; big kernels, very sweet. One of the best late varieties. 95 days.

Open-Pollinated

BANTAM EVERGREEN—A cross of Golden Bantam on Stowell's Evergreen. 14 to 18 rows. Deep, rich golden kernels, tender, sweet. 90 days.

BLACK MEXICAN—Pure white corn with purplish-black seed. Ears are 7 to 8-in. long, 8 straight rows. 88 days.

COUNTRY GENTLEMAN OR SHOE PEG (fr)—Prolific late variety. Favored by canners. Irregular kernels, very deep, sweet. 93 days.

GOLDEN BANTAM (fr)—The best and most favorably known of all the yellow varieties. Stalks often have 2 ears. Ears 8 rowed, kernels broad, with tender hull.

STOWELL'S EVERGREEN—White. Large ears about 8" long. Big kernels. Very sweet. Good late variety. 93 days.

POP CORN

SOUTH AMERICAN OR YELLOW DYNAMITE—Rich, creamy, yellow, smooth and round kernels, which pop double size of others. Ears 8 to 9-in. long. Vigorous grower. 115 days.

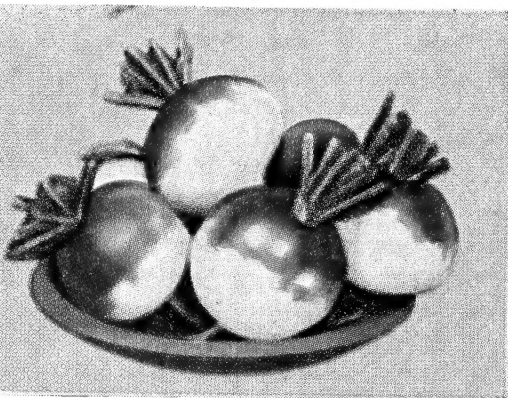
Hybrid Pop Corn

You will be delighted with hybrid pop corn. Yields are terrific; every plant produces corn with satisfying, big ears, with uniform popping ability. ASK US ABOUT THESE HYBRIDS!

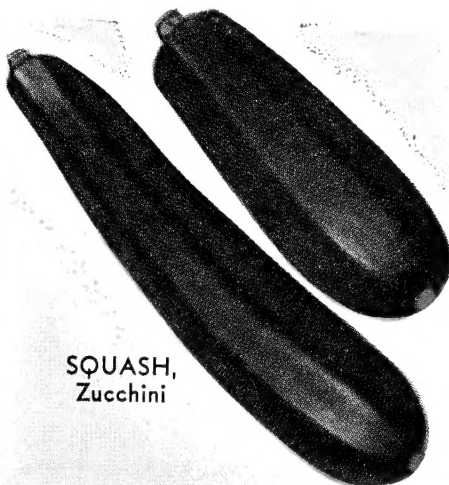
ALL VEGETABLE SEEDS

10¢ PER PACKET

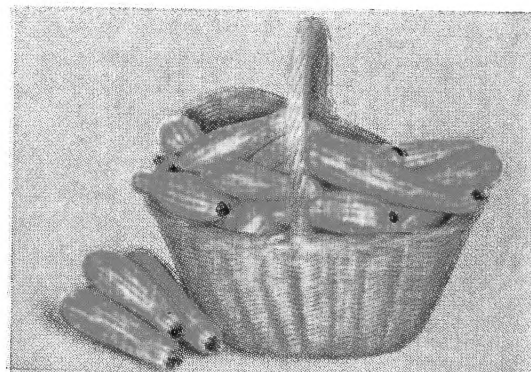
UNLESS OTHERWISE NOTED



TURNIP, Purple Top White Globe



SQUASH,
Zucchini



SQUASH, Early Prolific Straightneck

SQUASH, Uconn

BEANS, Topcrop

TOMATOES, Rutgers

CUCUMBER

Select soil fully exposed to sun and enrich thoroughly with fertilizer. Sandy soils with plenty of compost are best. Roots have difficulty on heavy soils. Plant 8 to 10 seeds in a "hill." Plant each hill about 36" apart. Cucumber vines like to stretch out, so plant rows about 4 feet apart. The old tale that melons or squash will cross pollinize with cucumbers and affect their taste if planted nearby is untrue. When vine is 6" long, thin to three strongest plants. Keep fruits picked to promote continuous fruiting. Use plenty of moisture; cucumbers are 90 per cent water.

A AND C—A long dark green cucumber which merits a trial. Uniform, nearly cylindrical, rounded at ends.

CUBIT—Won Bronze Medal Award in 1944 All-America Selections. Dark green, white spine cylindrical with blunt ends. Firm flesh and uniform coloring. New and worthwhile.

DAVIS PERFECT—Midseason, 9 to 10-in. long, tapered, good color. 68 days.

EARLY FORTUNE—Rich, dark green fruits with firm, crisp, pure white flesh. Grows to 9 by 2½-in. Ships well and is highly resistant to disease. Edible in 66 days.

LONG GREEN IMPROVED—Black spined, good pickling. Grows 10 to 15 in. long. Matures in 70 days.

MARKETER—Fine new variety, very prolific. Attractive rich, dark green color, carried right down to blossom end. Crisp, icy-white flesh. 7¾-in. long 2¾-in. diameter.

NATIONAL PICKLING—Rich dark green. Straight and rather blunt at ends but not chunky. Best all-around pickler. Edible in 55 days.

**ALL PRICES
IN THIS CATALOG
ARE SUBJECT TO CHANGE
WITHOUT NOTICE**

STRAIGHT EIGHT—Unsurpassed as slicing cucumber. All-American Selection, 2½-lb. fruits, rounded at ends, medium green. 68 days.

EGGPLANT

Requires continuous warm weather for best results. Seed should be started in a hotbed, as it is slow to germinate. Set plants in open ground when 2" tall and protect from hot sun when young. Be sure to keep young plants developing rapidly. Cultivate freely. To produce large fruits, remove lateral branches so as to reduce number of fruits per plant. Spray to protect from potato bugs.

BLACK BEAUTY (fr)—Large, egg-shaped, smooth, very dark purple fruits. Plant bears 4 to 5 fruits. Early.

NEW HAMPSHIRE HYBRID—Developed for short season areas. Round to olive shape fruits, growing low on the bush.

ENDIVE

Strictly a cool-weather crop: gets bitter at temperatures much above 80 degrees. Even moderately warm weather causes the plants to produce seed stalks. Plant very early. For late fall, sow early in middle autumn. Use last planting as late fall salad crop, and store surplus in cold frame or cellar by digging each plant with ball of soil. Plant in shallow drills with rows spaced 18" apart. When 4 inches tall, thin out to stand 6 inches to a foot apart. To blanch gather the outer leaves together and tie with soft twine or raffia. Do this when plant is nearly grown. Strings should be untied after a rain to permit leaves to dry and avoid rotting.

FULL HEART OR ESCAROLE—A strongly bunched mass of thick, slightly crumpled leaves, well blanched heart. Upright growing plant about 12 inches in diameter. 71 days.

GREEN CURLED RUFFEC—Plants 16 to 18-in. in diameter. Fine fall variety. White, tender, fleshy. 95 days.

HERBS

(AROMATIC, MEDICINAL AND KITCHEN)
Every garden has a place for herbs in the vegetable garden or for their ornamental appearance in the flower garden.

ANISE—An annual—used for garnishing, seasoning and for cordials. Seeds have an aromatic flavor. Plants 14". Matures in 75 days.

BASIL—SWEET—Annual; Ht. 12" to 18". Leaves, green or dried, are chiefly used as a seasoning for soups, stews, etc. 85 days.

BORAGE—Annual; Ht. 12-18". Young tender leaves are used as salad and also used to flavor lemonade and other cooling drinks. 80 days.

CARAWAY—Biennial; Ht. 18-24". Seeds used for flavoring. Young leaves and shoots used for flavoring salads. 70 days to maturity.

CORIANDER—Annual; Ht. 24-30". Seeds used for flavoring and in candy and to mask taste of medicine. 75 days.

CHIVES—Perennial; Ht. 6". Tops, finely chopped for adding mild onion flavor to soups, stews, salads, etc. 80 days to maturity.

DILL—Annual; 2' to 3'. Seeds and leaves used for flavoring—especially for dill pickles. 70 days.

FENNEL, SWEET—Biennial; Ht. 2' to 4'. Leaves are used for garnishing, fresh stems tender, eaten raw like celery or in salads. Seeds used for flavoring. 60 days to mature.

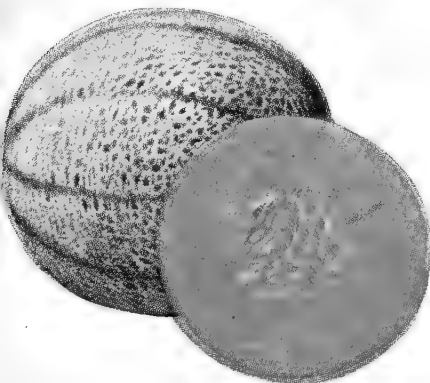
MARGORAM, SWEET—Annual; Ht. 1' to 2'. Used for seasoning either fresh or dried. 70 days.

ROSEMARY—Perennial used as annual; 2' to 4'. Fragrant odor and warm, pungent taste, acceptable seasoning.

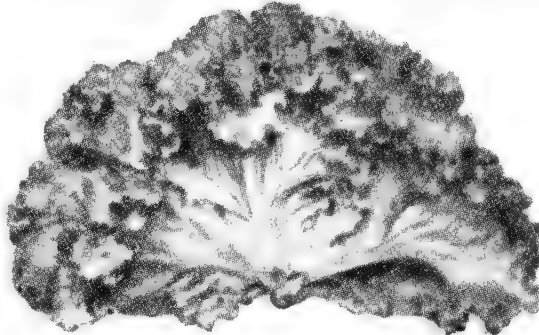
SAGE—Perennial; Ht. 14" to 16". Used for seasoning either fresh or dried. Matures in 75 days.

THYME—Perennial; Ht. 8" to 12". Aromatic foliage used as seasoning. 85 days to maturity.

9—N



MUSKMELON, Hale's Best



LETTUCE, Early Curled Simpson

CARROTS,
Chantenay

KALE OR BORECOLE

Early fall or spring sowing. Either in rows or broadcast. To produce large plants have rows 2' apart and thin to 2' in rows. Leaves are best after coming of cool weather in fall.

DWARF BLUE CURLED SCOTCH — Wide spreading, fine curled blue-green plant plume-like leaves. Used as a vegetable and for ornament. Exceptionally uniform. 55 days.

KOHLRABI

Sow seed in early spring or fall and when well established thin to 6" apart in the row. Even better to start it in beds and transplant same as cabbage. Planting at intervals of 10 days gives tender bulbs until hot weather. Must be used when young. Woody when old.

WHITE VIENNA EARLY (tr) — 8 to 10-in. leaves on slender stems. Bulbs 2 to 3-in., globular light green. Crisp, tender, clear white flesh. 55 to 60 days.

LEEK

LARGE AMERICAN FLAG — An early, popular variety, with thick, long white stems, leaves large and drooping, medium green. 130 days.

LETTUCE

Keep lettuce growing rapidly for best results. A light, rich soil needed for this. Earliest varieties must be started from seed in cold-frame. As soon as open ground can be worked, transplant. For later use, sow seed in open ground as soon as weather is favorable. Thin plants in rows 4" to 8" depending on variety.

Remember that lettuce is a fast-growing, rich feeding crop. Give it plenty of water. And use your compost or well-rotted manure liberally on the lettuce row. A light sprinkling of nitrate of soda will pay, too, because lettuce thrives on lots of nitrogen.

Heading or Cabbage

BIBB — Early, small headed lettuce of excellent quality and flavor. Perfect for home gardens. Very smooth, dark green leaves, bleaching to yellow.

BIG BOSTON OR MAMMOTH BOSTON — Popular for cold frame forcing and outside culture. Medium, compact, heads with creamy yellow heart. Smooth, glossy leaves, edges wavy, and slightly tinged with reddish brown. 75 days.

GREAT LAKES — ALL-AMERICA AWARD. An outstanding new Iceberg or Crisp-head type. A summer lettuce that stands heat well and is very resistant to tip burn. Heads medium, solid.

ICEBERG — Late, large variety. Compact heads, crumpled, crisp and sweet. Leaves light green, slightly brown on edges. 85 days.

IMPERIAL NO. 847 (FLORIDA ICEBERG) — Heads are of good size and solid. Does well in hot weather, and resistant to tip burn. Hardy. 83 days.

NEW YORK NO. 12 — The standard crisp-head lettuce. Large globular shaped head, dark green with blanching, silvery white heart. Successfully grown outdoors spring, summer and fall. Edible in 85 days.

WHITE PARIS COS OR TRIANON — Medium large self-folding dark green loaf shaped heads. Greenish-white, well blanched interior. 66 days.

Loose Leaf Varieties

BLACK SEEDED SIMPSON — Light green, frilled and crumpled. 45 days.

GRAND RAPIDS — Erect, compact plants. Light green, broad heavily fringed. For forcing or early planting. 43 days to maturity.

OAK LEAF — The most popular leaf lettuce for home gardens. Rich, dark green leaves, tender and delicious. Fine resistance to hot weather.

PRIZEHEAD — Early non-heading sort. Medium sized plants, crisp and tender. Color light brown on a medium green base. Leaves frilled at edges, and crumpled. 47 days.

SALAD BOWL — All America Gold Medal Award for 1952. Delicious bowl-full of rich green and decorative leaf lettuce.

10-N

how? when? HOME GARDENING GUIDE where? why?

SELECTING THE SITE

If possible select your garden site near the house and close to a water supply. It should be in an area which has at least six hours of sunshine daily. The convenience of access plus the opportunity of frequent observation of your garden are distinct advantages in having it close by.

Moving the garden hose is much easier if your site is near a water outlet. All vegetables are extremely high in moisture content and regular watering during dry spells is very important to insure a high yield.

If your garden is to be located on a slope, plan your rows to run laterally on the slope. Rows that run down-hill will wash away valuable fertilizers and top soil during heavy rains. Also the water runs away without fully benefiting your garden.

Garden Will Grow if Weeds Do

That the site should have fertile, deep and workable top soil is obvious. Most soils can be made productive with proper treatment. If grass or weeds grow fairly well on the area, there is reasonable hope that your garden, too, will respond to proper care.

If your space is limited, better omit crops like peas, corn and potatoes that need lots of room. And go slow on crops that you can buy in equal quality on the market, like potatoes, late cabbage and winter squash. Instead, favor the delicately flavored vegetables like leaf lettuce, early cabbage, green beans and summer squash that can never be shipped without some loss of quality.

WHY FERTILIZE?

Fertilizers contain matter that gives help to living soil micro-organisms which break down decayed matter into the chemical elements Nitrogen, Phosphoric Acid, and Potash, the important **big three** in soil fertility. With these three elements plus moisture and the right temperatures you can grow anything.

Balanced fertilizers contain all three of these soil elements and with proper soil acidity or alkalinity make a highly productive garden possible; of course, with proper weather help. Loess, a strange soil formation in Eastern Europe and Northern China, contains a world of soil, but it is without fertility and therefore lifeless. Without these three important elements that assist and make micro-organisms created by the fertilizer, there can be nothing that will give roots for your planted seed to sustain itself.

"Black Soil" is a misnomer. Soil color has nothing to do with fertility. Loess is black, yet it grows nothing. Fertilizers help those bugs and microscopic plants that make plant growth possible. Fertilize, Fertilize, Fertilize. It has paid off in productive results as far back as anybody can remember.

Fertilizer must not come in contact with the seed or roots. Fertilizer may be applied along the rows in a band about 3 to 4 inches wide and about 2 inches from the line of seeds. Do this by scooping out a wide furrow about 2 inches deep with a good-sized common hoe and then distributing the fertilizer uniformly along the row.

Mix fertilizer thoroughly with top soil and cover about 2 inches deep. This is the most efficient way to use fertilizer.

"Lettuce" grow Lettuce, Suggests Old Gardener



There's nothing that looks quite so pretty and is probably considered less for good eating than lettuce. Take away that crisp, pretty green lettuce that **makes** a salad and

you're right down to Cole Slaw which is good alright, but quite a ways from good eating on a **steady** diet basis.

The kind of lettuce you can grow at home — really crisp, fresh leaf lettuce — is the kind every master chef sighs for and can't get. As soon as your soil is workable, plant a row of black Seeded Simpson, or Oak Leaf. Or if you like head lettuce, try Big Boston, a butterhead full-flavored kind you can't buy on the market.

That new salad bowl lettuce is what I'm working on this year for a change.

Hot weather is hard on most lettuce, but try Great Lakes: you'll be surprised how well it grows and how slowly it bolts to seed. And you'll be delighted with its good crisp head lettuce flavor.

For a real treat, try Oak Leaf. It combines the wonderful flavor and quality of leaf lettuce with the productivity and crispness of head lettuce. If allowed to stand, it produces loose heads.

Remember that lettuce is a fast-growing, rich feeding crop. Give it plenty of water. And use your compost or well-rotted manure liberally on the lettuce row. A light sprinkling of nitrate of soda will pay, too, because lettuce thrives on lots of nitrogen.

how? when? HOME GARDENING GUIDE where? why?

SPADING AND PLOWING

The right tool, unless you are accustomed to something else, is the round-pointed long handled shovel. If there is any slope to your garden, start at the lower end, as the natural tendency is for soil to work down grade.

There's a trick to spading for best results. Drive the spade straight down. Dig a trench and lay the soil from the trench, aside at the end. Now spade with the blade not parallel to the trench but at right angles to it. Lift it up and turn the spade over so that the top soil, humus and plant food which you have added are dropped underneath and into the trench you have spaded previously. When the last row is dug, carry the soil removed from the first row to fill in the last trench. If the good soil is deep, spade to a depth of 8 to 12 inches. If the top soil is shallow, avoid digging up the subsoil. Pulverize the soil, breaking up clods with an iron rake and remove stones or trash. Just before planting any area of the garden, work that part finely and smooth off with a rake before laying out the rows.

If you must plow, be sure the soil is right. Many good plots have been ruined by plowmen who insist on working when the soil was too wet. Before you decide on machine work, consider this: by working only an hour a day for five days, a man of average strength can dig a good-sized garden and leave the soil in better condition than the ordinary tractor job, worked with farm equipment usually too heavy for garden use.

LAYING OUT THE ROWS

Laying out the rows with military precision pays off at thinning and cultivation times. Ragged, irregular rows of root crops particularly, are very difficult to thin properly—results in loss of yield and seed from over or under thinning.

Straight lines of well established plants will not permit weed encroachment except in the easy-to-cultivate areas between the rows themselves.

A cord stretched from a stake at either end of the row will serve as a guide in opening a furrow. For smaller seeds, press the end of the hoe handle into the soil along the line to form a 1/2" deep furrow. Finer seeds can be planted in this furrow, covered with about 1/4" of soil. In heavy clay it will pay to use a special covering mixture of either pure sand or half sand and half peat moss. Sifted compost can be substituted for the peat.

Furrows two to three inches deep for peas and beans need not be filled at once. An inch of covering at the most is enough. Fill the trench with soil as the plants grow.

PLANTING IN HILLS

Hills are "holes" on points, and distinguished from drills, which are rows. Plants sown in hills are usually either vines, or large bushes, which need so much room in the row they cannot be sown in drills. For example, cucumbers, melons, squash, sweet corn, bush squash and tomatoes.

The procedure is to stretch a line, just as you would for a seed drill, and along this mark the location of the hills at the proper intervals.

When the seeds sprout they should be thinned out to the required number of plants. For those that grow in bush form, one plant to a hill is all that should be grown. Sweet corn is sometimes grown three plants to a hill; and vine crops the same. Thinning should be gradual, at first enough to insure each infant plant a chance to grow without interference from neighbors. Then as the plants become established the weakest should be eliminated until only the desired number remain.

The Old Gardener—On Spading and Sweet Corn



When the soil can be crumbled in your hand it is dry enough to spade. Spading wet soil forms clods that are difficult to break up. Mould a ball of soil in your hand and pat it to make a mud pie. If the pie holds together the soil is too wet to spade.

If you are going to tackle a sizable job of spading, it's good strategy to work at it only an hour a day. Then you'll be done before you realize it and the job will not be so exhausting.

Some joker once said, 'Don't spade up a bigger garden for yourself than your wife can take care of.' At our house we enjoy adventuring in the garden so much we argue good naturedly to see who gets to work on it. The windup is that except for the plowing we share the whole fun. Finding and classifying garden weeds and bugs,

"who found them first," and what to do about them along with all the other interesting daily changes makes our garden a major conversation topic.

The joy that comes from out-of-doors exercise, the fresh air, the savings in food bills plus the sheer extra-goodness of the food itself are such great rewards that we never consider gardening as "work."

And speaking of extra food goodness, for instance, there's no comparison between home grown sweet corn and the kind you have to pay good money for.

Most sweet corn is really sweet only if it's home-grown. It must be cooked within an hour of the time it's picked if you want the true sugar flavor. As soon as it's picked, the sugar begins to turn to starch, and six hours after its picked, most of the sweetness is gone. So if you really want sweet, sweet corn, grow your own.

If you've got the freezer space to spare this year try quick freezing a few packages of corn on the cob. Tastes extra fine in those mid-winter months when fresh sweet corn isn't available or so limited in quantity that the price is beyond eating tempretation.

MELONS

MUSKMELON AND CANTALOUPE
Easily injured by cool weather. Before planting, spade liberal forkful of well rotted manure into each hill. Plant 8 to 10 seeds to a hill. Thin plants to four per hill after third leaf develops, and train vines in different directions. On moist ground, use shingles to hold melons off ground to prevent rotting. If grown in cool weather or where nights are cold, will not bear well and melons will have poor flavor.

BENDER'S SURPRISE—Similar to Tip Top. Coarse netted 7-lb., oblong fruit, distinctly ribbed hard greenish-yellow skin. Flesh bright salmon. 95 days to maturity.

HALE'S BEST—Flesh thick, deep salmon-pink, sweet and tasty. Heavily netted rind, with faint stripe. Small seed cavity. Outstanding variety, resistant to powdery mildew. 4 lbs. 86 days.

HEARTS OF GOLD OR IMPROVED HOODOO
—Nearly round 2-lb. fruit, distinctly ribbed, deep green with fine grey netting. Thick, deep salmon flesh, tender sweet, Edible in 94 days.

HONEY ROCK OR SUGAR ROCK—Round, 4-lb. fruit. Gray-green skin, coarse, sparse netting. Orange-salmon, thick flesh, fine flavor. 85 days.

PRIDE OF WISCONSIN—Small seed cavity and thick, orange flesh, excellent flavor. Matures early. Large size. A new melon which is deservedly becoming a leader. 92 days.

ROCKY FORD — Fruits small with rather large red cavities. Nearly round, 2 1/2 lbs. No ribs. Flesh thick and green with golden tinge at center. Very juicy and spicy. Excellent quality. 92 days to maturity.

GOLDEN DELIGHT—Winner of the 1952 All America Bronze Medal. Delicious orange or salmon flesh. Fruits elongated and firmer than most of its class.

WATERMELON

Requires about same culture as muskmelon, except the vines need more room. fertilize each hill liberally and cultivate thoroughly.

COLE'S EARLY—An early variety for the North. Medium size fruit, short oval with alternate dark and light green stripes. Pink-red flesh, black seeds and tender rind. 76 days.

DIXIE QUEEN—Very prolific. Bright-red, crisp, splendid quality fibreglass flesh. Few small, white seeds. 85 days.

KLECKLEY'S SWEET OR WONDERMELON—Large, cylindrical, dark bluish-green, with thin, tender rind. Bright red, juicy, sweet flesh, creamy-white seeds with traces of brown. 85 days.

NEW HAMPSHIRE MIDGET

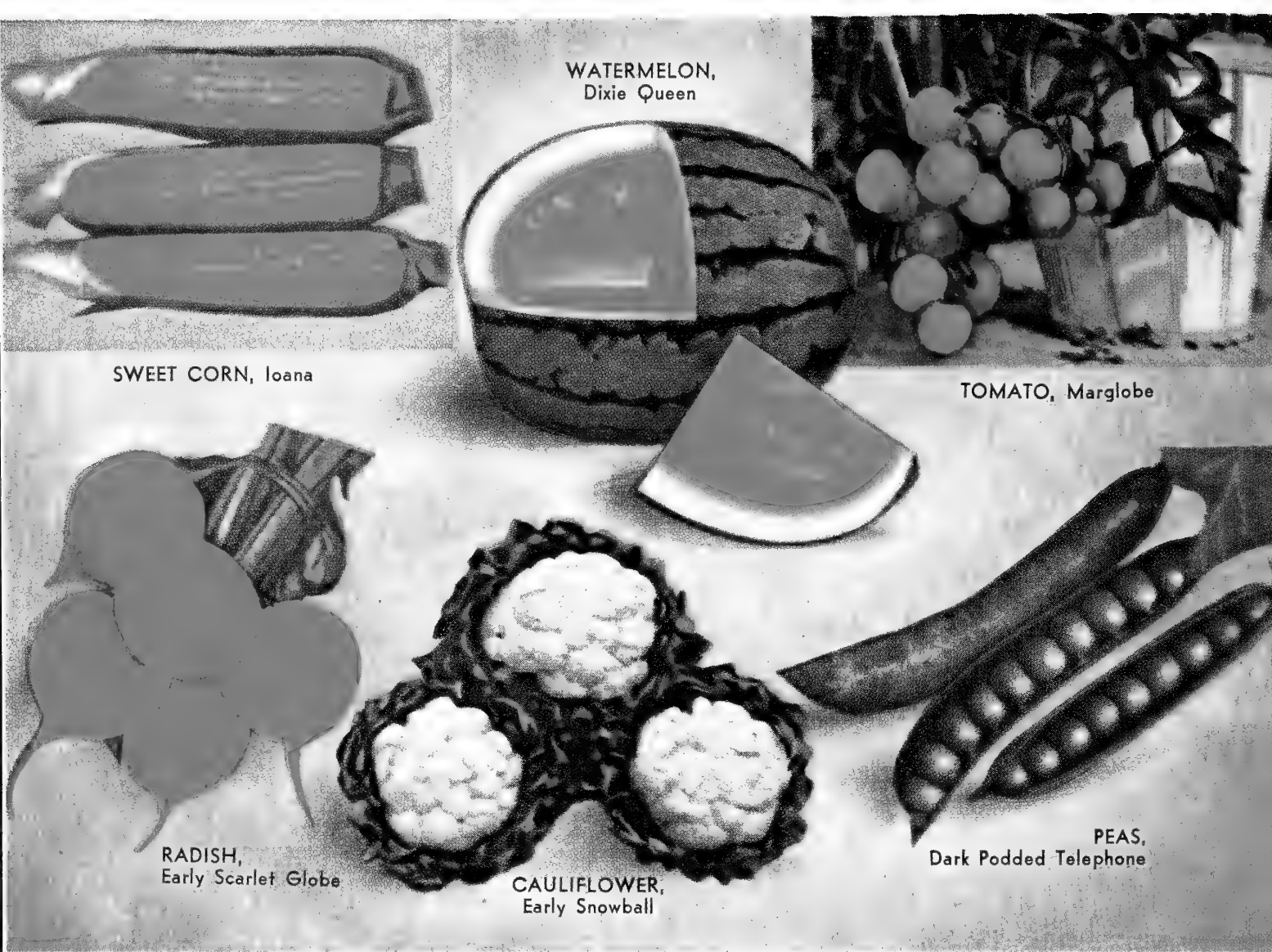
Icebox size, strawberry-red flesh with a very good flavor. Attractive, distinctive, grows on a small vigorous vine and has rather large black seeds for its size. 78 days. Packet 15c.

NEW HAMPSHIRE MIDGET—Icebox size, very good flavored strawberry red flesh. The best midget so far produced and recommended where standard or large sized watermelons do not mature satisfactorily. 78 days. Pkt. 15 cents.

STONE MOUNTAIN—Also called Dixie Belle. High quality shipping variety. Fruits very large, oval-round, blunt ends. Dark green, tough rind. Flesh rich, scarlet, fine grained, sweet. Seed white with black tips. 90 days.

TOM WATSON—Red heart strain. Large fruit, uniform cylindrical, with tough elastic rind, faintly veined. 90 days.

HAWKESBURY—Large 25-40 lbs. Oblong. Flesh dark red, sweet and of good quality.



WATERMELON,
Dixie Queen

SWEET CORN, Ioana

TOMATO, Marglobe

RADISH,
Early Scarlet Globe

CAULIFLOWER,
Early Snowball

PEAS,
Dark Podded Telephone

MUSTARD

Sow as early as possible in the spring. Keep rows 6" to 12" apart and cover with soil $\frac{1}{2}$ " deep. You may also sow seed in autumn to raise greens, and for salads.

FORDHOOK FANCY—Upright growing, mild variety. Bright green leaves, plume-like and deeply fringed on the edges. 50 days.
SOUTHERN GIANT CURLED—Large, frilled and crumpled. Light green leaves. 35 days to maturity.

OKRA OR GUMBO

Sow in rows about 3" apart. Cover seeds with about 1" of fine soil firmly pressed down. Thin plants 18" to 24" apart when they reach 3" growth. Do not plant until ground is warm, as this is a tender, hot weather plant. Pick before woody fibres develop.

DWARF GREEN — Early, prolific dwarf growing sort. Dark green fluted, 5 to 7-in. pointed pods. Most desirable, compact growing okra. 50 days.

PERKIN'S MAMMOTH LONG POD—Early and prolific. Very tender, long pods. Deep green and slightly corrugated. Edible in 68 days.

ONIONS

Plant as soon as soil can be prepared. For best yield, plant on very fertile land—fall plowed, and thoroughly fertilized. When plants are a few inches tall, thin to prevent crowding—using the plants removed as green onions. Leave 4" apart for globe-types and 6" for the big Spanish types to mature for dry onions. Latter can also be started indoors for largest bulbs and can be set out 6" apart after frost danger has passed. All onions need liberal feeding and watering. Those left to become fully ripe can be stored for winter. Cultivate and hand weed every two weeks in summer.

Yellow Varieties

YELLOW SWEET SPANISH—Large, globe-shaped, exceptionally mild and sweet—excellent for eating raw or boiled. Light yellow skin and pure white, firm, crisp, and tasty flesh. 112 days.

YELLOW GLOBE DANVERS—An oval shaped straw-colored onion. White flesh, crisp and mild. Splendid keeper. Matures in 110 days.

White Varieties

SOUTHPORT WHITE GLOBE—Best of the whites. Medium-sized, round, solid white bulbs, fine thin skin. Waxy white flesh, mild and fine grained. Keeps well in fall. 110 to 112 days.

WHITE BUNCHING—A good Spring appetizer. Crisp and mild. Fine for cooking when grown larger. 60 days.

WHITE PORTUGAL OR SILVERSKIN—Excellent flat variety. Dependable cropper, excellent for sets, for green bunching, or as a pickler. 100 to 102 days.

Red Varieties

SOUTHPORT RED GLOBE—Finest of all red onions. Perfectly round, good sized bulbs with thick, small necks. Skin is deep purplish-red. Strong flavored flesh, white tinged with pink. Good keeper, productive. 112-114 days to maturity.

ONION PLANTS

Sturdy, hardy plants that come to you all ready to set out. Ask for prices.

ONION SETS

Onion sets used instead of seeds will produce earlier crops of green onions or large bulbs. Plant seeds right side up and cover with garden rake; then firm the soil well over the sets.

RED, WHITE, YELLOW

PARSLEY

Does best in rich, mellow loam. Seed is slow to germinate, and is helped by soaking in warm water overnight before planting. Sow early and not too deeply. Space plants 6" apart. When curled varieties are about 3" tall, cut off leaves. The new growth will be brighter and curlier.

MOSS CURLED OR TRIPLE CURLED—Compact, dark green leaves, curled and fine-cut. 70 days.

PARSNIP

Needs rich, mellow soil for best growth. Must be planted as early as ground can be worked. Soil must be loose to a depth of 12" and cannot be heavy. Rows should be 15" to 18" apart. Cover seed $\frac{1}{2}$ " and press down soil. Thin out to 4" when plants have made a good start. Cold weather turns starches into sugar and improves flavor. Roots are hardy: leave in ground over winter if desired.

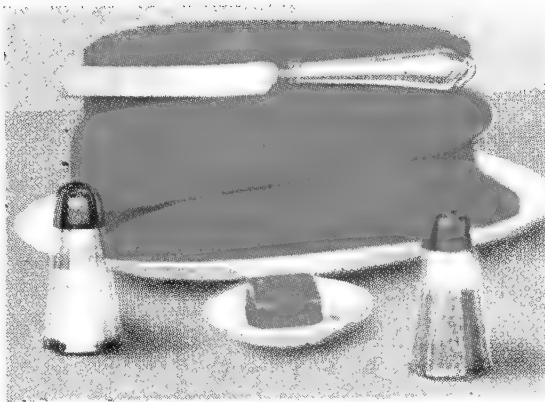
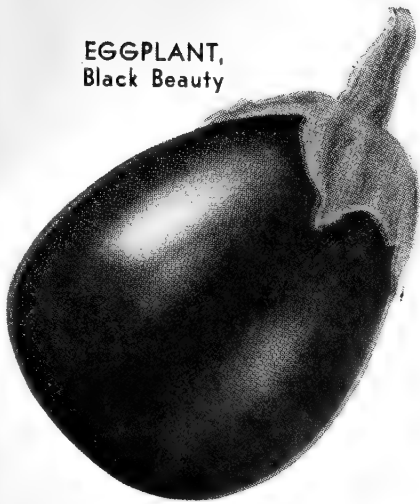
HOLLOW CROWN (fr)—The most generally grown kind. Roots $2\frac{1}{2}$ to 3-in. thick at shoulder. 12 to 14-in. long, uniformly tapered, hollow crowned. Edible in 95 days.

ALL VEGETABLE SEEDS

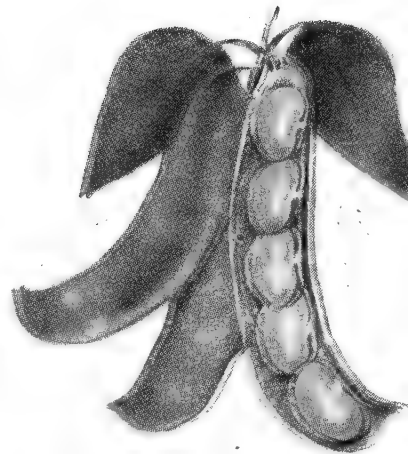
10¢ PER PACKET

UNLESS OTHERWISE NOTED

**EGGPLANT,
Black Beauty**

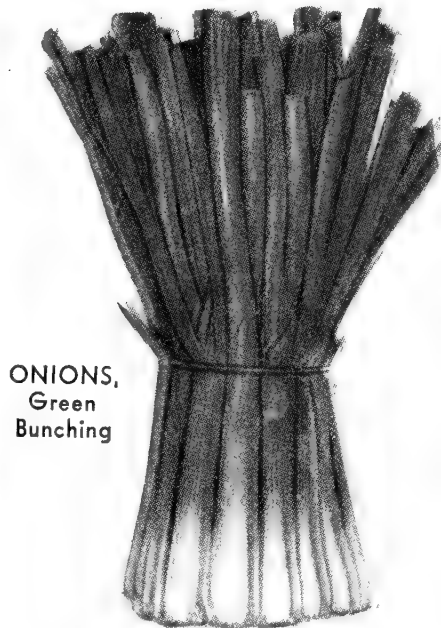
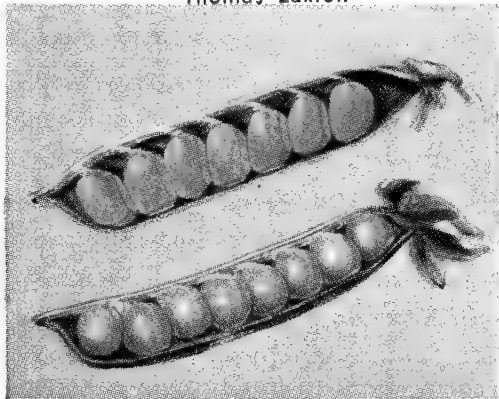


SWEET CORN, Golden Cross Bantam



BEANS, Fordhook Bush Lima

**PEAS, Little Marvel (Top)
Thomas Laxton**



**ONIONS,
Green
Bunching**

**ONIONS, Sweet Spanish (Left),
Yellow Globe Danvers**



PEAS

Early peas need a light, warm soil; but general crop thrives best in moderately heavy soil. (Avoid fresh manure and very rich or wet, mucky soil as this produces large growth of vine at the cost of quality of the peas.) Plant seed in rows at 2" depth. Keep rows 21" to 28" apart for dwarf varieties and 28" to 42" for the taller types. Gather crop as fast as it is fit to use or new pods will cease to form and those partly advanced will cease growth.

Plant variety Alaska as soon as ground can be dug. Plant wrinkled varieties (which have better flavor) when narcissus buds show color or when crocuses are in bloom. Peas are not satisfactory when weather turns hot. Tall varieties must be staked. Most home gardeners prefer dwarf varieties like Little Marvel. Peas want well-limed soil. Don't forget, inoculation improves production.

Early and Second Variety

ALASKA—Wilt resistant. Used for canning and early home garden. Blunt, straight light-green, 3-in. pods. Plants 32-in. 69 days

FREEZONIAN—Luscious, melting peas that retain their garden fresh sweet flavor after freezing. 3½ inch pods packed with 8 or 9 medium sized peas, 63 days. Pkt. 15 cents. All America Gold Medal Winner 1950.

LAXTON'S PROGRESS (fr)—Medium dark green vine, 16 to 18-in. Single pods almost an inch wide and 4½ to 5-in. long, with 7 to 9 large peas, 62 days.

LITTLE MARVEL (fr)—Outstanding, dwarf. Fine quality, large yield. Single and double, dark green, 3-in. pods—blunt, plump, well filled with 7 to 8 medium sized, light green tender peas. Edible in 62 days.

THOMAS LAXTON (fr)—Medium height. Strong vine bears numerous dark green,

blunt ended pods, 4 to 4½-in. Retains flavor and sweetness. One of earliest, 57 days.

Later Varieties

ALDERMAN OR DARK-PODDED TELEPHONE (fr)—Large podded variety of the Telephone family. Excellent for home gardens, truckers, shipping to distant markets and for freezing; resistant to Fusarium wilt. Vine dark green, coarse. Pods single, very broad, plump, straight, dark green, pointed; contains 8 to 10 peas of highest quality. Seed large, wrinkled, light green, 74 days.

HUNDREDFOLD OR LAXTONIAN—Exceptionally choice and prolific. Dark green. Rather coarse vines. Straight pointed, well-filled 2½" pods. 62 days.

Edible Podded or Sugar

MAMMOTH MELTING SUGAR—Wilt resistant. Coarse light-green vine, 54-in. Single 4½-in. pods, broad, indented light, blunt, stringless, without fiber, fleshy. Contains 7 peas. Seed large, round, creamy-white, 74 days.

PEPPERS

Need long growing season: start indoors 8 weeks before plants are wanted. Set plants 15" x 24" and feed liberally for bigger fruits.

Warm, mellow soil in sheltered location is best. Cultivate regularly, drawing soil up around stems. When plants are 7" to 8" tall, hoe in light dressing of commercial fertilizer. Do not plant hot peppers near sweet; they are apt to cross.

Sweet

CALIFORNIA WONDER IMPROVED—Number one quality peppers, about 4-in. long and 3½-in. diameter, very smooth, 3 and 4 lobed, glossy green, turning bright crimson when ripe. Remarkable thick walls, tender, sweet, 75 days to maturity.

PIMENTO OR PERFECTION—Best of the medium sized sweet peppers. Excellent for stuffing. Smooth, heart-shaped, about 3-in. long, 125 days.

RUBY KING—All-America, bred for size and uniformity. Dark green turning to bright deep red fruit. Thick flesh sweet and mild. 60 days.

WORLD BEATER—One of the best large peppers. Glossy-green, changes to bright red. Mild, very sweet, thick flesh. 75 days.

Hot

HUNGARIAN WAX—Slender, waxy yellow fruit about 6-in. long turns red when ripe. Very hot, 65 days.

LONG RED CAYENNE—The hot favorite. For canning, pickling, drying. Pungent flavored fruit, tapering and twisted. Matures in 70 days.

PUMPKIN

Plant in middle of spring among corn; or in hills 8' apart each way. Drop 4 seeds to a hill. If planted in hills, cultivate the same as melons and cucumbers. For winter use gather before frost (leave stem 3" to 4" long) and store in warm, dry place.

CONNECTICUT FIELD—Large fruit with flat ends, 15 to 25-lbs. and up to 15-in. Surface, slightly ribbed, deep orange. Thick flesh, orange-yellow, sweet and coarse. 118 days.

KING OF THE MAMMOTH—Largest of all pumpkins. Valuable for stock feeding and exhibition. Globular, slightly ribbed, flattened, weigh 60 to 90-lb. Flesh solid, yellow-orange, coarse, but good quality. 120 days.

SMALL SUGAR OR NEW ENGLAND PIE—Desirable for pie or general use. Round, flat end fruit, deep orange. Thick, yellow-orange flesh, 118 days.

RADISH

Soil should be light, quick and rich to insure rapid growth. Slow growth makes the flavor too strong. Sow as early as ground can be worked, as radishes are very hardy. Make successive sowings up to hot weather. When in the third leaf, thin to give roots plenty of room. Pull promptly when mature. The secret of crisp, delicious radishes is quick growth, prompt picking.

CRIMSON GIANT—Large round, 1 to 1½-in. Deep crimson roots. Very crisp and tender for its size. 28 days.

EARLY SCARLET GLOBE—Globular, slightly elongated, bright scarlet. 24 days.

EARLY SCARLET TURNIP, WHITE TIPPED—Carmine red with white tip. Flesh white, crisp and mild. 26 days.

FRENCH BREAKFAST—Roots thicker toward bottom, 1½-in. long by ½ to ¾-in. Dull scarlet, white tipped. 25 days to maturity.

WHITE ICICLE—Tapering roots 5 to 5½-in., White, mild flesh. 27 days.

Fall and Winter Varieties

CELESTIAL OR CHINESE WHITE WINTER—White flesh, rather mild in flavor. Roots large, 8" long and 2½ to 3 inches in diameter, cylindrical with heavy shoulder. 60 days.

LONG BLACK SPANISH—Good keeping winter variety. White, crisp and pungent. 8 to 9-in. long, slightly tapered. Edible in 58 days.

ROUND BLACK SPANISH—Top-slaped. 3" to 4". Flesh white, crisp and of strong flavor. 56 days.

RUTABAGA

(SEE TURNIP)

SALSIFY

Light, rich soil best and it must be stirred to a considerable depth. Sow in rows 18" apart. Cover seeds firmly with ½" of fine soil and thin plants later to 2" to 3" apart in the row. Cultivate the same as carrots.

MAMMOTH SANDWICH ISLAND—A palatable and nutritious vegetable when cooked. Flavor is remarkably similar to oysters. 120 days.

SPINACH

Plant seed in very rich soil in rows spaced 14" to 18" apart. Keep plants thinned out from 3" to 6" apart in the row. (Seed may also be sown broadcast) Sown in fall for winter use and spring for early use.

BLOOMSDALE SAVOY, LONG STANDING (tr)—A few days later than regular Bloomsdale Savoy. Holds from 12 to 14 days longer. 42 days.

GIANT NOBEL OR GIANT THICK LEAF—Large, vigorous, spreading plant, slow to form seed stalks. Heavy yielder. Large, thick smooth, deep green leaves. 45 days.

NEW ZEALAND—Thrives in dry hot weather. Can be picked repeatedly all season. Not a true spinach, but similar when cooked. 70 days.

SQUASH

Follow same planting and culture as for melons and cucumbers. Plant summer varieties 6 or 8 seeds in hill 3' to 4' apart each way and winter squash 8' apart. Plants bear longer if squash is picked off as soon as it is ready for use.

Summer Varieties

EARLY PROLIFIC STRAIGHTNECK (tr)—Earlier, smaller, and more productive than Giant Summer Straightneck, and more uniform. Brilliant yellow. Fine for home or market. 50 days.

(Continued on next page)

how? when? HOME GARDENING GUIDE where? why?

ON TRANSPLANTING

Use good seedlings if you transplant. They should be medium green in color, not too tall, and the leaves should be free from spots or dead areas. Avoid seedlings that are reddened or purplish in color, or show signs of yellowing (except in the case of celery plants, which can be quite yellow and still be good).

Tomato, eggplant, and pepper plants are tender and should not be set out before danger of frost is past. Cabbage, cauliflower, and kohlrabi are less tender but it is not safe to set them out much before the frost-proof date.

Use care in transplanting or you will injure the tender plants.

When soil is sufficiently moist so a ball of soil can be retained around each individual root there is less chance of injury or of air pockets being left around roots. Use a trowel. (It is important that roots be kept in close contact with soil so they can get moisture.)

When seedlings are to be transplanted without a ball of soil, long tap roots should be shortened, and the whole roots system placed and "firmed in" so that it is well spread out, not bunched. Soil in which roots are placed must be finely pulverized.

When roots have been carefully placed in position, firm the soil around each plant enough to insure that roots are in contact with the soil, and that there are no air pockets.

Transplant in cool, cloudy weather or at evening or early morning.

As soon as the garden has been planted, water thoroughly but gently with a fine spray.

CULTIVATION—WEEDING

1. "Destroy them young" should be the first principle in controlling weeds. Weeds rob the soil of moisture and food. Worst of all, if allowed to grow, they shade the crops that require six hours of full sunshine to grow normally. Plan to spend half an hour a day hoeing weeds and the average garden can be kept up without difficulty.

2. Keep the soil from caking or cracking because when rain comes, it cannot penetrate the hard surface and may run off and be lost. A prong cultivator will leave the surface loose and ready to absorb rain.

3. Air is vital to plant growth: stir the soil as soon as the ground is dry enough after a rain or after watering. This also saves moisture. Use the hoe and save the hose.

4. When cultivating stay as far away from the plants as you can to avoid packing the soil around the roots.

WATERING

Soak, don't sprinkle. Your garden needs water when the leaves look wilted in the sun and do not recover freshness over night.

Except for transplants, try to avoid watering the garden until it really needs water.

Do a thorough job. The hose or sprinkler should be allowed to run on one spot until water stands on the surface. If you have an ordinary hose, remove nozzle and place a small board under the end of the hose to distribute water gently.

Water in the evening or early morning. After watering, the soil should be moist to a depth of five to six inches. Check this with a spade to be sure.

GIVE YOUR GARDEN A HEAD START! WITH BIG, HEALTHY, VEGETABLE PLANTS

This year treat your family to earlier vegetables by starting your garden with our Selected Plants. These are big healthy, strong plants that will grow and thrive, and produce abundantly the vitamin-rich, healthful vegetables everyone craves and needs.

We can supply you with most every type of thriving vegetable plant ready to set out. They are all husky specimens . . . hardy and full of growth. This year have earlier and more vegetables by setting out plants,

ALL VEGETABLE SEEDS

10¢ PER PACKET

UNLESS OTHERWISE NOTED

SQUASH—Continued

GIANT SUMMER CROCKNECK—Prolific bush type plant, curved neck fruits around 4 to 5-lb., 20 to 24-in. long. 4 to 5-in. diameter, 56 days.

MAMMOTH WHITE BUSH SCALLOP— $3\frac{1}{2}$ " long, 9" in diameter. Retain their white color at later stages. 56 days to maturity.

ZUCCHINI—Straight, cylindrical fruits, 3 to 4-lb., 3 to 5-in. through 10 to 14-in. long. Mottled and striped green-creamy-gray. Delicate flavored flesh, 60 days.

Fall and Winter Varieties

BUTTERNUT—Dry sweet yellow flesh of superb texture and excellent flavor. Has only a small seed cavity. Is tasty baked or boiled. Easily grown and a good keeper. Packet 15 cents.

GOLDEN HUBBARD—An early, small variety. Fruits pointed at each end moderately varied. Dry, deep orange flesh of fine quality.

IMPROVED GREEN HUBBARD (fr)—Most widely grown of any winter squash. Round, warty, dark green with thick yellow flesh. Weight 12 to 14 lbs, 100 days.

TABLE QUEEN OR DES MOINES OR ACORN (fr)—Acorn-shaped, green, deeply furrowed flesh, rich yellow, dry, mealy, delicious. Convenient size for baking and serving in halves, 100 days.

UCONN—A highly productive squash of the "Table Queen" or "Des Moines" type. Bushy plants that do not have the rambling characteristics of most squashes. An excellent keeper. Dark green shell with golden flesh. About 5" in diameter. Pkt. 15 cents. All America Gold Medal Winner 1950.

SWISS CHARD (SEE BEETS, LEAF)

TOMATOES

Do best in sandy, well pulverized loam. Sow seed in hotbed or indoors. When plants are about 2" high, set out 3" apart, in boxes or pots—later transplant into the garden. Or keep in flats until weather is warm and settled, and then set plants out directly into the garden. Water around the roots of the plants when setting them out if ground is dry. Cultivate frequently until plants shade the ground. Remove all but the two or three strongest branches. Study methods of staking and training vines and adopt the one best suited to your situation.

BEEFSTEAK—Rich scarlet-red, extra large fruits, more or less ribbed. Juicy, solid, with rich sub-acid flavor. One of the best for home use, 90 days to maturity.

BONNY BEST—Second early variety, valuable for canners. Medium-vine, not very hardy. Medium-sized, apple-shaped, solid fruits, scarlet, 73 days.

EARLIANA—Open, spreading, medium small vines. Red fruits run to medium size. Thick; smooth fruit, 66 days.

FIRESTEEL—Scarlet red. Medium size, almost globular, smooth small core. Very fleshy and firm. Practically no cracking.

JOHN BAER—Thick, scarlet (similar to Bonny Best). Smooth, firm, medium large fruit. 70 days.

JUBILEE—Orange colored fruit. Juicy with few seeds. Weighs about 6 oz. Bears over a long season, 72 days.

MARGLOBE—Moderately productive, with heavy foliage. Vigorous and resistant to wilt and rust. Fruits medium large, nearly round, smooth, and solid. Deep red, 77 days.

OXHEART—Plant open, spreading. Moderately productive. Fruits large, roughly heart shaped, firm, meaty and of mild flavor, 90 days.

**ALL PRICES
IN THIS CATALOG
ARE SUBJECT TO CHANGE
WITHOUT NOTICE**

How to build healthy soil—with Peat Moss

Peat Moss literally gives soil new life—by adding pure, weed-free, spongy, 98% organic vegetable matter. It opens up the soil, admitting vital air and moisture, and acts as a reservoir for plant food, releasing it to the roots as they need it. Thus, it insures maximum return from seed, fertilizer and time invested.

Peat Moss loosens heavy soils . . . gives substance to light soils . . . gives all soils loam-like texture . . . prevents surface crusting. The result is that Peat Moss makes soils "breathe deeply" and retain moisture, thus enabling roots to develop to their maximum vigor. Healthy roots grow healthy plants.

FLOWERS BULBS	Mix well a 2 to 3 inch layer of moist Peat Moss into top six inches of soil. Add plant food and (except for acid-loving plants) 5 lbs. of agricultural lime per bale of Peat Moss.
VEGETABLES	Spade a 2 inch layer of moist Peat Moss into top 6 inches of soil. Add agricultural lime (10 lbs. per 100 sq. ft.), except for root crops like potatoes, turnips, carrots, etc.
ROSES TREES SHRUBS	Dig large hole so roots can spread freely. Mix $\frac{1}{3}$ moist Peat Moss with $\frac{2}{3}$ soil (by bulk) for fillback. Settle soil in filled hole by soaking. A 2 inch mulch of moist Peat Moss will doubly ensure sturdy growth.
EVERGREENS	Plant broad-leaved (Azaleas, Camellias, Rhododendrons, etc.) in a 50-50 mixture of moist Peat Moss and soil. For cone-bearers (pines, spruce, hemlock, etc.) use $\frac{1}{3}$ Peat Moss, $\frac{2}{3}$ soil. A 2 to 4 inch mulch of Peat Moss improves appearance.
LAWNS (new)	Mix 1 to 3 inches of Peat Moss into top 6 inches of soil. Rake in plant food, sow grass seed, roll (in dry weather), and water gently.
LAWNS (established)	Topdress with $\frac{1}{4}$ inch Peat Moss and rake it in well every six weeks. To renovate poor spots, work $\frac{1}{2}$ inch Peat Moss into soil, add fertilizer, reseed, and water well.
INDOORS	House Plants: Mix $\frac{1}{3}$ Peat Moss to $\frac{2}{3}$ good loam. A pinch of plant food helps if yellowing of leaves develops. Bulbs: Fill container with Peat Moss. Keep moist. For tulips use $\frac{1}{3}$ Peat Moss, $\frac{1}{3}$ loam, $\frac{1}{3}$ sharp sand.
COMMERCIAL	Propagating: Use a 50-50 mixture of Peat Moss and sharp sand. Transplanting: Mix $\frac{1}{3}$ moist Peat Moss with $\frac{2}{3}$ soil. Lining-out beds: Use soil mixture containing 25% Peat Moss for deciduous stock, up to 100% Peat Moss for Azaleas, Rhododendrons, etc.
ANYWHERE STORING	Use Peat Moss any time to improve poor soil and maintain good soil. Store and ship bulbs, roots, fruits, vegetables in Peat Moss. It is light, absorbent; it insulates and protects.

As a Summer Mulch—When plants are growing well, after cultivating soil, mulch around them with 1 to 4 inches of moist Peat Moss. This will keep down weeds, make further cultivation unnecessary, keep the soil moist and cool, and the roots vigorous, and give your plantings a neat, well-groomed appearance.

(Chart by courtesy of Premier Peat Moss)

As a Winter Mulch—Peat Moss is a splendid insulating material. It prevents root injury by soil-heaving (alternate thawing and freezing). After the first freeze, apply about 2 inches of Peat Moss around all plants and hill up about 10 to 12 inches around the base of roses and shrubs. Apply moist to prevent blowing. In the Spring, Peat Moss can be raked off and used elsewhere as a soil conditioner.

PONDEROSA—One of the largest varieties. Spreading large vines. Solid, fine flavored, pink, with small seed cells. Somewhat rough and flat. Have a tendency to crack, 88 days.

PRITCHARD'S SCARLET TOPPER—Medium to large round, with thick, firm flesh and small seed cavities. Brilliant red throughout, coloring right to top, without hard green spots. Free from acidity, one of the best home canners. Early.

RUTGERS—Second early variety. Large thick stems, vigorous foliage. Fruits similar to Marglobe but flatter at stem end. Bright red, with thick walls. Red, firm flesh, low acidity, 72 days.

STOKESDALE—An extremely important development. Smooth 7-oz. fruit, brilliant color, exceedingly solid flesh and small seed cavities. Matures in the second-early group, a full week earlier than Marglobe.

STONE IMPROVED—Medium late. Ripens evenly and is uniform. Fruits large, flattened but deep. Smooth, attractive, scarlet-red, of fine flavor, 86 days to maturity.

VALIANT—Plant sparse and open. Fruits large for an early variety, globe shaped and of bright scarlet color.

SMALL FRUITED—Red and yellow varieties, shaped like miniature pears, plums, and cherries; very attractive for preserves.

TURNIP

For summer greens or roots, sow as early as radishes and lettuce. Then cut when plants are 6" high. Sow again in summer for fall and winter use. Turnips do best when most of their growth is made in autumn or early spring. Should be grown rapidly for best flavor and for finest texture.

GOLDEN BALL OR ORANGE JELLY—Medium size, deep yellow with bronze-green top. Creamy yellow flesh of fine texture. 65 days.

PURPLE TOP WHITE GLOBE (fr)—Large, sweet tops, Smooth, globe-shaped roots, purple-red above, white below. Sweet tender, crisp, white flesh, 50 to 60 days.

PURPLE TOP STRAP LEAF—Home and market garden variety. Deep purplish-red on top, white below. Flesh white and never stringy.

Foliage Turnip

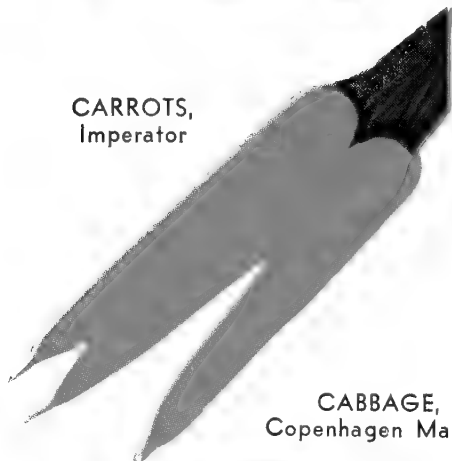
SEVEN TOP OR WINTER GREENS—For greens or forage. Young shoots extremely tender, 50 days.

Rutabaga or Swede Turnip

AMERICAN PURPLETOP—Hardy and productive. Tender firm, light yellow, sweet flesh, 88 days.



BEETS,
Detroit Dark Red

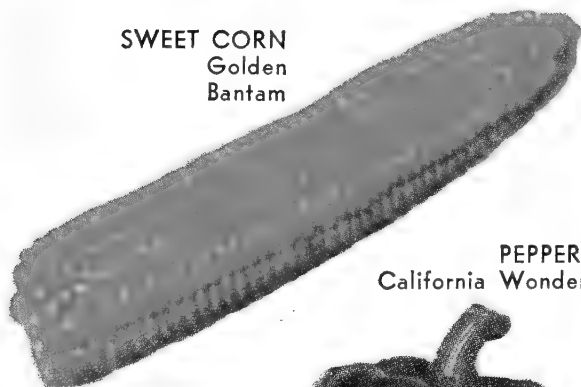


CARROTS,
Imperator

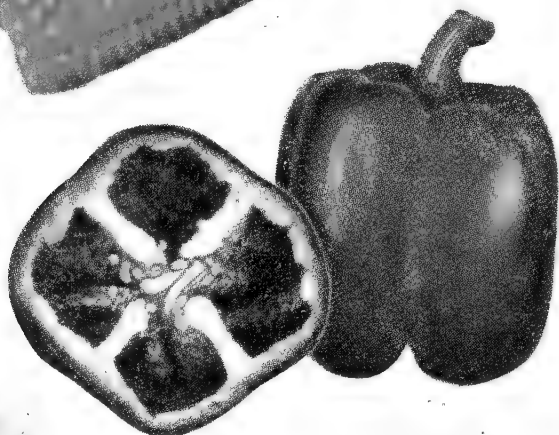
CABBAGE,
Copenhagen Market



SWEET CORN
Golden Bantam



PEPPER,
California Wonder

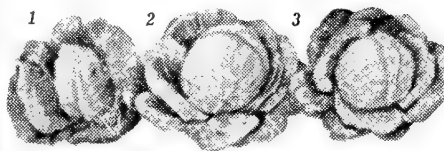


HOW BIG? WHAT SHAPE?

(A Guide to Sizes of Popular Vegetable Varieties)

Because it is impossible to have all our vegetable illustrations give you an accurate idea of the size of each variety shown, we are showing you these exact "true-to-scale" comparisons of many of the popular vegetables. Streamlined or plump—short or tall—you can determine the vegetable types you want by this chart.

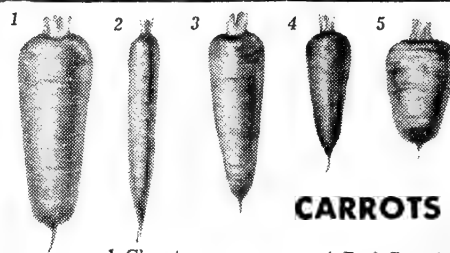
CABBAGE



1 Early Jersey
Wakefield

2 Golden
Acre

3 Copenhagen Market



1 Chantenay

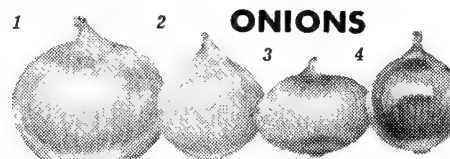
2 Imperator

3 Danver's Half Long

4 Red Cored
Chantenay

5 Oxheart

CARROTS



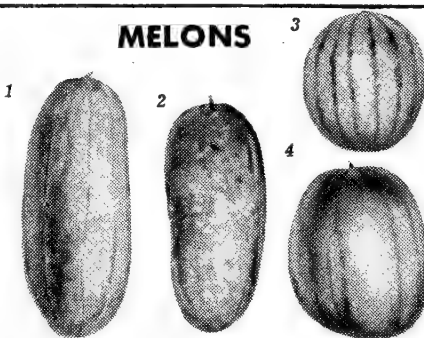
1 Sweet
Spanish

2 Southport
Yellow Globe

3 White
Portugal

4 Southport
Red Globe

ONIONS



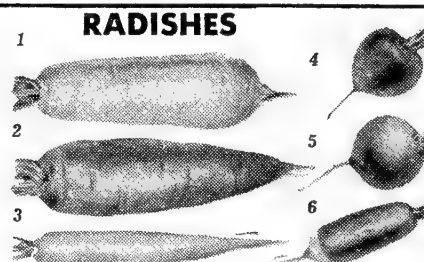
1 Kleckley's
Sweet

2 Tom Watson

3 Dixie Queen

4 Stone
Mountain

MELONS



1 China Rose
Winter

2 Long Black
Spanish

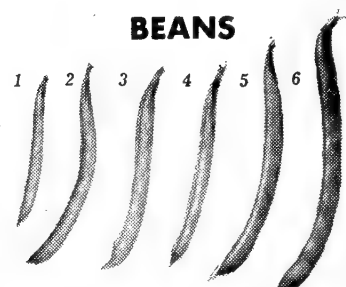
3 White
Icicle

4 Crimson
Giant

5 Early
Scarlet Globe

6 French
Breakfast

RADISHES



1 Improved
Golden Wax

2 Giant
Stringless

3 Pencil Pod
Black Wax

4 Tendergreen

5 Bountiful

6 Kentucky
Wonder

7 Henderson's
Bush Lima

8 Fordhook
Bush Lima

BEANS



Golden Bantam



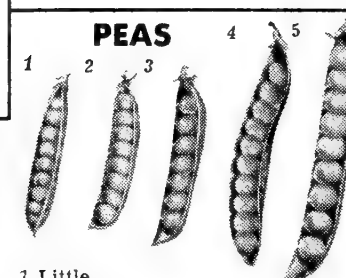
Golden Cross Bantam



Country Gentlemen



CORN



1 Little
Marvel

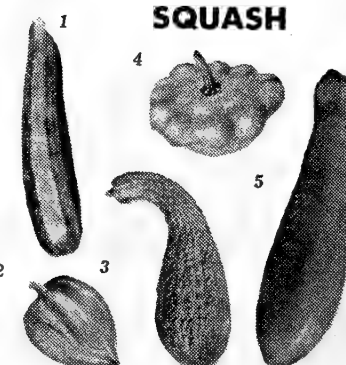
2 Alaska

3 Thomas Laxton

5 Alderman

4 Laxton's
Progress

PEAS



1 Zucchini

2 Table Queen

3 Summer
Crookneck

4 Early White
Bush Scallop

5 Early Prolific
Straightneck

SQUASH

HOW TO BUY FERTILIZERS

A Standard Garden Encyclopedia offers this excellent advice: "In buying fertilizers the gardener will do well to follow the practice of the most successful commercial growers, namely, to confine his selection to standard brands that have given satisfactory results over a long period of years, and to make his final choice upon the basis of the actual cost of the plant-food ingredients rather than the prices of the mixtures as a whole. Some mixtures which cost more than others are actually more economical than others that cost less, when the contents of each are calculated on the basis of actual fertilizing ingredients."

"Sometimes analysis figures do not convey the true worth of a mixture, especially if not backed up by a reliable manufacturer or dealer. Some ingredients may be slowly soluble or practically insoluble in one brand but readily so in another. For instance, a fertilizer composed of wood ashes, ground phosphate rock and sulphate of ammonia would not be comparable in value, though having the same percentage analysis, as another composed of nitrate of soda, muriate of potash, and superphosphate. Hence it is important to know what the composition is as well as how much of each ingredient is in the mixture."

We offer special purpose fertilizers for use wherever a special formula is needed. Knowing the soil conditions and growing problems of this territory as we do, we can prescribe just the right formula for every case.

We have fertilizers for vegetable gardens, flowers, roses, trees, lawns—whatever the need.

Whether you know the formula you want—or want one recommended especially to handle some situation of your own, be sure to consult us

VEGETABLE GARDEN PLANTING GUIDE

"TIME TO PLANT" KEY

A—As soon as soil can be worked.
B—Week before last spring frost.

C—In time to allow maturity before freeze.
D—When danger of hard freeze is over.

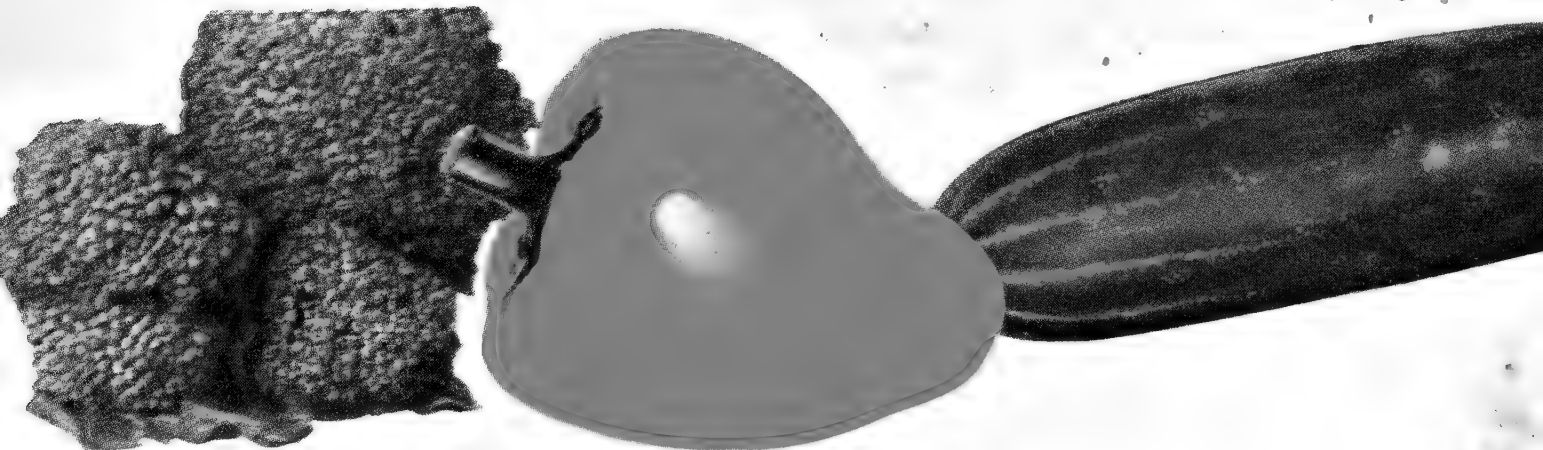
E—Two weeks before last spring frost.
F—When danger of frost is over.

	Seed Required for 50 ft. of row	Distance Between Rows (inches)	Distance Apart In Row (inches)	Depth to Plant (inches)	Time to Plant	Days Growing Period	Edible Period	Approx. Yield Per 50 ft. of Row		Seed Required for 50 ft. of row	Distance Between Rows (inches)	Distance Apart In Row (inches)	Depth to Plant (inches)	Time to Plant	Days Growing Period	Edible Period	Approx. Yield Per 50 ft. of Row
ARTICHOKE	1/8 oz.	48	48	1/4	A				MUSKMELONS	1/2 oz.	60	48	3/4	F	90-120	3-4 wk.	50 fruit
ASPARAGUS	1/2 oz.	24	20	1/2	A	2-3 yr.	4-5 wk.	25 lbs.	MUSTARD	1/4 oz.	24	9	1/2	A-C	28	until fall	1 bu.
BEANS, BUSH	1/2 lb.	24	4	1 1/2	B	50-70	4-5 wk.	20 qts.	OKRA	1 oz.	36	15	1	F	50	until fall	450 pods
BEANS, LIMA	1/2 lb.	24	3	1	B	60-90	3-4 wk.	32 qts.	ONIONS	1/4 oz.	18	4	3/4	A	110-140	4-8 wk.	1 bu.
BEANS, POLE	1/2 lb.	36	8	1 1/2	B	60-90	6-8 wk.	30 qts.	ONION SETS	1 pt.	12	8	1/2	A	50-100	4-8 wk.	60 bun.
BEANS, POLE LIMA	1/2 lb.	48	8	1 1/2	B	88	3-4 wk.	1 1/4 bu.	PARSLEY	1/4 oz.	12	6	1/2	D	90-120	until fall	45 bun.
BEETS	1/2 oz.	24	3	1/2	A	55-100	4-6 wk.	1 1/4 bu.	PARSNIPS	1/2 oz.	18	4	1	A	100-150	until fall	1 bu.
BROCCOLI	1/8 oz.	24	24	1/2	A	80-120	8-10 wk.	25 head	PEAS	3/4 lb.	24	2	1	A	50-70	1-2 wk.	1 bu.
BRUSSELS SPROUTS	1/8 oz.	24	18	1/2	A	70-110	6-8 wk.	15 qts.	PEPPERS	1/8 oz.	30	20	1/2	F	100-140	until fall	300 fruit
CABBAGE	1/4 oz.	24	12-24	1/4	A	75-130	4-6 wk.	35 head	PUMPKIN	2 oz.	96	60	3/4	F	90-120	until fall	25 fruit
CHINESE CABBAGE	1/2 oz.	24	12	1/2	C	75-85	4-6 wk.	40 head	RADISH	1/2 oz.	12	2	1/2	A	25-30	1-2 wk.	50 bun.
CARROTS	1/4 oz.	16	3	1/2	A-C	65-85	6-8 wk.	24 qts.	RHUBARB	1/2 oz.	48	48					100 stem
CAULIFLOWER	1/4 oz.	24	20	1/2	A-C	65-90	1-2 wk.	25 head	RUTABAGA	1/8 oz.	24	6	1/2				1 bu.
CELERY	1/8 oz.	24	8	1/4	D	100-140	6-8 wk.	100 stalk	SALSIFY	1/2 oz.	18	2	1/2	A	130-150	fall	300 roots
COLLARDS	1/4 oz.	30	18	1/2	C	24-36	until fall	3 bu.	SPINACH	3/4 oz.	18	5	3/4	A-C	40-60	1-3 wk.	1 1/2 bu.
CORN, SWEET	4 oz.	36	9	1	E	65-100	1-2 wk.	100 ears	SPINACH, N.Z.	1/2 oz.	36	18	1	D	70	until fall	50 lbs.
CORN, POP	3 oz.	34	8	1	E	115			SQUASH, BUSH	1/4 oz.	48	48	1	F	60-80	until fall	60 fruit
CUCUMBER	1/2 oz.	48	36	1/2	F	60-100	4-6 wk.	100 fruit	SQUASH, WINTER	1/4 oz.	72	72	1	F	100-140	fall	35 fruit
EGGPLANT	1/8 oz.	36	24	1/2	F	110-150	until fall	75 fruit	SWISS CHARD	1/2 oz.	18	15	1	A	50-60	until fall	25 lbs.
ENDIVE	1/2 oz.	18	12	1/2	A	80-100	3-4 wk.	50 head	TOMATOES	1/8 oz.	40	36	1/2	F	100-150	6-12 wk.	2 bu.
KALE	1/2 oz.	32	22	1/2	A-C	70-100	until fall	50 plants	TURNIPS, ROOTS	1/4 oz.	18	4	1/4	A-C	50-70	1-3 wk.	1 bu.
KOHLRABI	1/4 oz.	24	6	1/2	A-C	55-75	2-3 wk.	1 bu.	TURNIPS, GREENS	1/2 oz.	12	4	1/4	A-C	50-60		1 1/2 bu.
LETTUCE	1/4 oz.	18	12	1/4	E	90-120	3-4 wk.	50 head	WATERMELONS	1/2 oz.	60-96	60-96	3/4	F	90-130	3-4 wk.	20 fruit

BROCCOLI, Italian Green Sprouting

PEPPER, Pimento

CUCUMBER, Straight Eight





Some ideas on what to look for in the garden

Following is a list of vegetables and the insects that most commonly attack them:

ASPARAGUS—The Asparagus Beetle.

BEANS—Mexican Bean Beetle. Aphids. Leaf Hoppers. Red Spider Mites.

BEETS, CHARD and SPINACH—Aphids. Spinach Flea Beetle, Spinach Leaf Miner.

CABBAGE, CAULIFLOWER, BROCCOLI, BRUSSEL SPROUTS—Cabbage Worm. Cabbage Looper. Root Maggots. Aphids.

CARROTS, CELERY—Carrot Weevil, Leaf Tyers.

CORN—Corn Borer. Ear Worm.

CUCURBITS (VINE PLANTS)—Melon Aphid. Striped Cucumber Beetle. 12 Spotted Cucumber Beetle. Squash Vine Borer. Squash or Stink Bug.

LETTUCE—6 Spotted Leaf Hooper.

ONIONS—Thrips. Onion Maggot.

PEAS—Pea Aphid.

POTATO, TOMATO, EGGPLANT, PEPPER—Aphid. Colorado Potato Beetle. Flea Beetle. Leaf Hopper. Tomato Horn Worm. Tomato Fruit Worm. (This is the corn ear worm.) Cut worm.

WHAT THEY DO

APHID—Sucks. Colors and sizes varied. Found on under side of leaf and on stems. Soft-bodied, wingless—also with long, narrow transparent wings 3 times as long as its body. Causes discoloring or curling of leaves.

ASPARAGUS BEETLE—Gnaws shoots and feeds on foliage.

MEXICAN BEAN BEETLE—Chews. 8 black spots on each wing. Spiny larvae skeletonizes leaves.

CABBAGE WORM—Velvety green with yellow stripes. Chews holes in leaves.

CABBAGE LOOPER—Pale green with white stripes along sides. Chews.

COLORADO POTATO BEETLE—Lays yellowish orange eggs in groups of 20-30 on underside of leaves. 5 yellow and 5 black stripes on each wing. Chews.

CUCUMBER BEETLE—Yellow with 3 black stripes on back. Chews.

CUT WORM—Cuts off plant at soil level. Found within 8"-10" radius of plant, about an inch below ground surface. Dull colored, variably-striped. Curled up. Chews.

CARROT WEEVIL—Chews. Legless, brown headed grub. Tunnels into crown of plant, filled with a sawdust like material or sealed up with black exudate to hide eggs.

CODLING MOTH—Pinkish white, brown-headed worms eat holes from side or blossom end of apple to core.

CORN BORER—Chews. Found on under side of leaves. Flat masses of pearly white eggs, overlapping like scales and pinkish worms 1" long with dark heads.

A PORTRAIT GALLERY OF GARDEN ENEMIES

SUCKING INSECTS



GLADIOLUS THRIP, 1/16"



BEET LEAF HOPPER, 1/8"



MELON APHID, 3/32"



CABBAGE APHID, 1/32"



SQUASH BUG, 5/8"



CHINCH BUG, 3/16"



TARNISHED PLANT BUG, 1/4"



RED SPIDER MITE, 1/60"

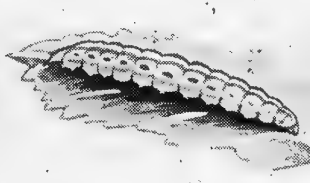
CHEWING INSECTS



ASPARAGUS BEETLE, 7/32"



ROOT MAGGOT, 1/3"



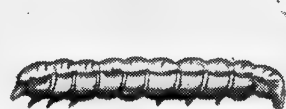
CABBAGE WORM, 1"



STRIPED CUCUMBER BEETLE, 1/4"



SPOTTED CUCUMBER BEETLE, 1/4"



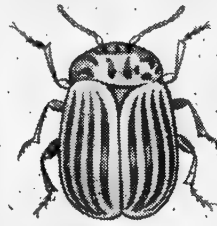
CUT WORM, 3/4" - 1"



SQUASH VINE BORER, 1/2"



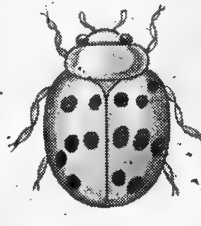
TOMATO HORN WORM, 3" - 4"



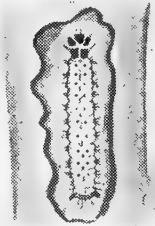
POTATO BEETLE, 3/8"



FLEA BEETLE 1/16"



MEXICAN BEAN BEETLE, 5/16"



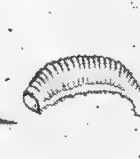
CORN BORER, 1"



CODLING MOTH, 1/2" - 3/4"



CABBAGE LOOPER, 1 1/2"



CARROT WEEVIL, 1/4"



CORN EAR WORM, 1/4" - 1 1/2"

CORN EAR WORM—Chews. Green to brownish, with white stripes along sides. Found in silk end of ear.

FLEA BEETLE—Chews. Shiny, black, round beetle. Chews sieve-like holes.

LEAF-HOPPER—Sucks. Found on under side of leaves. Pale green. Slender winged, wedge shaped. Gives leaf tips scorched appearance, puckering.

TOMATO HORN WORM—Chews. Large green worm with yellow markings and prominent horn-like projection at rear.

THRIPS—Sucks. Tiny yellow or brownish slender bodied, pointed at both ends. Narrow plume-like wings. Nymphs wingless, same size and shape, but watery white with bright red eyes.

ROOT MAGGOT—Chews. Causes pale yellowish green plants that wilt and die. Check dirt at roots for white legless worm or elongated white eggs.

RED SPIDER MITE—Sucks. Found at apple blossom time on under side of leaves. 8 legged, very tiny, reddish, whitish, greenish mite. Causes yellow or brown blotches on leaves with powdery appearance on under side.

SQUASH OR STINK BUG—Sucks. Egg clusters of 25-50 reddish brown eggs found on under side of leaves. Bug flat, brownish and stinking.

SQUASH VINE BORER—Chews. Wasp-wings and transparent under wings. Abdomen marked with red or orange. Legs have orange, black and white hair. White worm with dark brown head. Look for dull, red oval eggs on stems.

Different bugs require different treatments. We carry a full line of effective insecticides and sprayers. Ask us about them.

A Suggested Program For Garden Sanitation

About 75% of the work and much of the damage caused by insects can be eliminated by a simple, regular program of sanitation. Preventive dusting or spraying is much easier than waging a losing battle against bugs when they appear. Usually, less than 30 minutes a week should be needed for a regular sanitation program for both flowers and vegetables.

Along with a regular program of insect control, plan on destroying weeds along the edges of your garden, the place where insects hide during the winter. If possible, control the weeds for a distance of at least 25 feet on all sides of the garden. Not only will this eliminate insect hiding places, but it will reduce the number of weed seeds that might otherwise blow onto your garden. This program involves two chemicals. Apply a 5% dust of D.D.T. to the grass and weeds about every three weeks, so that most insects that might otherwise move into the garden will be killed. So will mosquitoes, chiggers and harvest mites that make gardening so unpleasant.

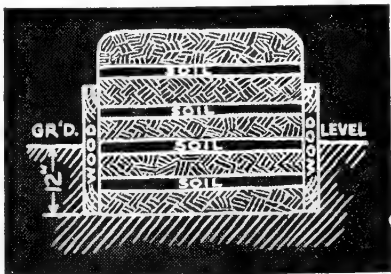
USE CAUTION WITH 2,4-D

The regular use of 2,4-D will keep down all of the broadleaved weeds, without danger of poisoning animals, children or of damaging equipment with corrosive sprays. In using 2,4-D around flowers and vegetables, however, be extremely careful not to allow the spray to drift onto these, as most garden plants are as easy to kill with this material as the weeds.

Any spray that will kill grasses will also hurt the soil so that it can't be used for growing plants for several years. If this is not objectionable, use one of the non-selective weed killers—and clear the ground of all vegetation (as on driveways, tennis courts, etc.) Ask us for details.

HOW TO BUILD A COMPOST HEAP

The compost heap is a "must" for the permanent garden. Select a spot behind a shed or otherwise hidden (if your garden is in the open) and spread out your garden wastes over this area in a layer six inches deep.



Use weeds, old vegetable and flower plants, vegetable waste from the kitchen and lawn clippings. Trimmings from lawn edging are particularly valuable.

Notes On Building Hotbeds and Cold Frames

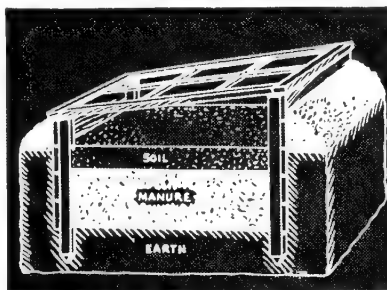
Normally, these do not pay if used only for growing seedlings, but the advanced gardener will find them useful for protecting plants in fall, for storing winter vegetables or for growing lettuce and radishes until long after they are available in the open garden.

These should be located on the south side of a hedge, fence or building to break the wind, and must have at least six hours of direct sunshine during the day.

TYPES: Hotbeds can be heated with fresh manure, leaves, electric cables, electric bulbs or through a basement window.

Standard hotbed sash is three feet wide and six feet long, so if sash is purchased, make hotbed of these dimensions. Many gardeners use a storm window after the worst cold of winter is over. Frame should be sloped by making north side six to eight inches taller than south side to catch sunlight and to provide good drainage.

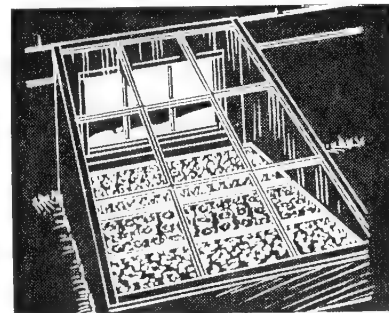
Dig hole six inches larger on all sides than the frame on which sash rests.



Pit should be 24" deep. Fill to top with fresh straw horse manure and press down six inches. Set frame over manure and fill around outside and inside to level of ground. Add three inches of sifted soil inside frame. Heap leaves or straw around outside to conserve heat. If manure is not available, dried leaves or chopped straw may be used by adding a handful of ammonium nitrate or ammonium sulfate to each bushel of leaves. This will not, however generate as high a heat as manure.

As soon as frame is in place, water well, insert thermometer in soil and cover with sash, airing daily until thermometer drops below 85 degrees. This is time to plant tomatoes and peppers. For cabbage, cauliflower, broccoli and kohlrabi, allow thermometer to go below 75 degrees.

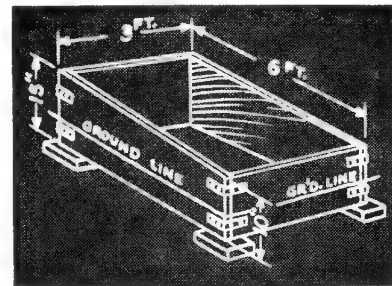
On sunny days ventilate thoroughly, but even on cloudy days a crack of air may be needed to get rid of ammonia odor. Cover glass at night with blankets, old rugs or hotbed mats to conserve heat.



BASEMENT WINDOW GREENHOUSE

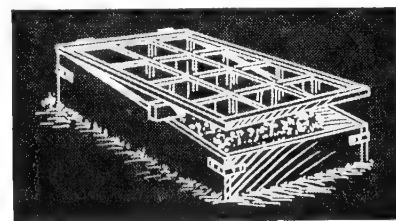
The frame for a basement window greenhouse is made the same as for a manure hotbed, but the back is omitted and no pit is dug. The open back fits against the basement window. The open window both ventilates and heats, so that in most instances no further ventilation will be needed. On very cold nights, a 100 watt electric bulb will keep up heat.

Electric hotbed cables are usually installed over a bed of sand six inches thick, and covered with 1/2" mesh hardware cloth. Electric lights (two 100 watt lamps for each 3 x 6 sash) can be used and controlled by a chicken brooder thermostat.

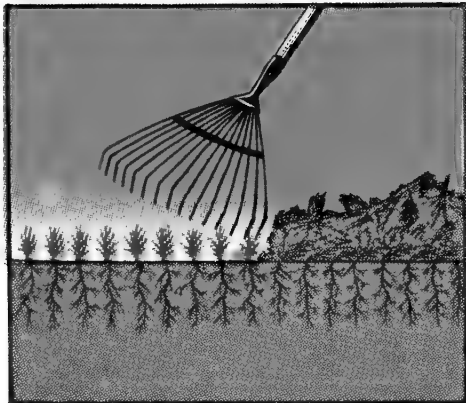


COLD FRAMES

A cold frame is the same as a hotbed without manure or other source of artificial heat. It depends upon the sun for heat, and must be covered with hotbed mats to conserve this heat at night. It can be used only after the weather has warmed up somewhat, but before the danger from late frost is past. Lettuce and radishes planted in the cold frame a month before frost is expected can be grown until late in the year if the glass is kept covered at night.

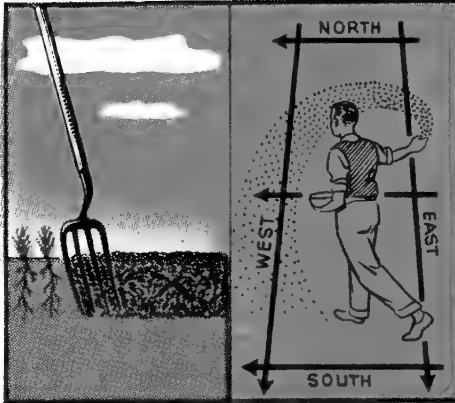


LAWN CARE SUGGESTIONS



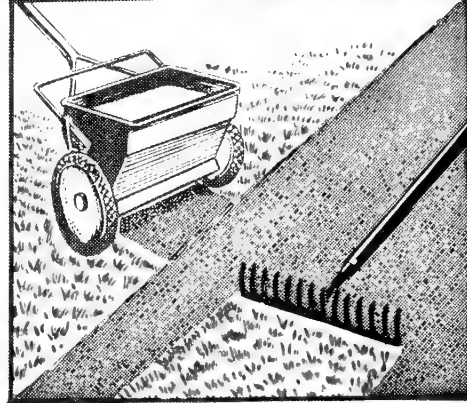
WHISK, DON'T RAKE

Accumulations of debris and leaves on the lawn chokes off growth of new grass and permits nests for harmful insects. A thorough whisking (not a heavy raking that uproots new grass) in early spring and late fall when the weeds have stopped seeding gives old and newly germinated grass a head start in the battle against weeds. Experts recommend that **short** clippings be left on the ground. Long clippings should be gathered.



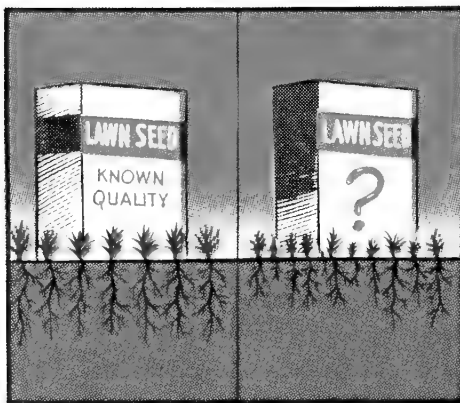
STARTING OVER, SOMETIMES PAYS

(Left) To insure growth from those bare and persistently thin areas: Reseed them as though starting a new lawn. Dig up and pulverize the soil in the bare areas and mix with a balanced fertilizer. Reseed, then roll it sufficiently to press the seed into the soil. (Right) When sowing lawn seed in large areas, choose a windless day. Sow in two directions; one at right angles to the other.



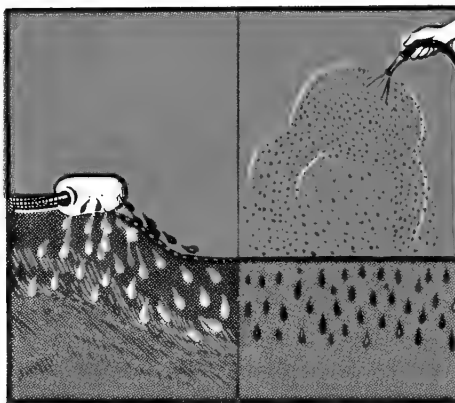
GOOD GRASS MUST BE FED

Established grass roots are notoriously heavy feeders. An early spring and late fall application of a balanced plant food plus a mid-summer stimulator will keep those grass roots busy delivering a healthy, lush, carpet of green. Apply uniformly at about 3 lbs per 100 square feet when the grass is dry. Brush the plant food off the blades with the back of a rake; then water thoroughly.



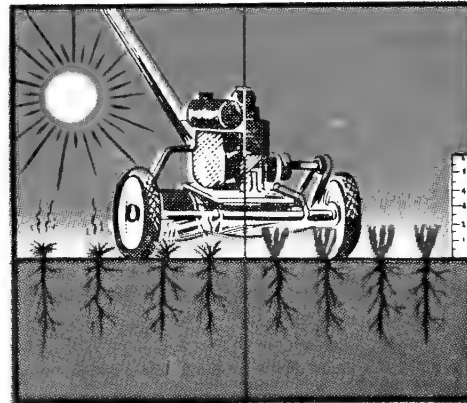
HOW MUCH, OR HOW MUCH WHAT?

In most cases, properly **blended** grass mixtures are best for year round growth. Lawn mixtures contain varied proportions of **expensive** and **inexpensive** seed. The cost of your lawn seed should be determined by the **known percentage** of these proportions not by the pound of mere "lawn seed." When you buy our lawn seed mixtures the blend is right and the price is right. Whether you are planning a new lawn or rebuilding, come in and talk it over.



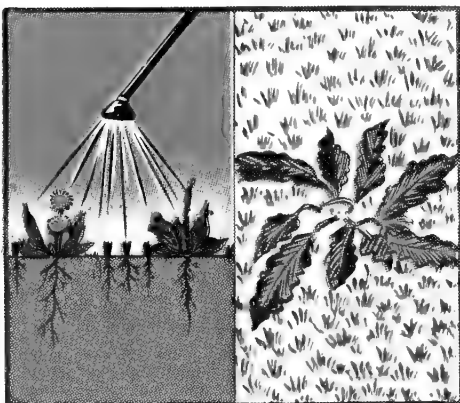
TWO WATERING IDEAS

(Left) Watering slopes should be done by **soaking** from the top, this permits the crest to get an adequate water supply before it runs off to the bottom of the hill. (Right) Sprinkling newly seeded areas should be done with a misty spray not a stream, either by hand or with an efficient sprinkler, otherwise the seed will be displaced and gather in pools, thus ruining the even distribution of your sowing.



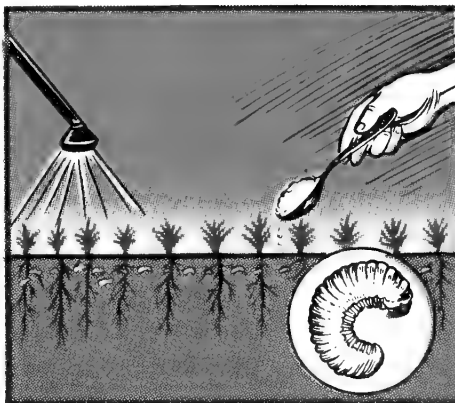
HOW LOW TO MOW

Mowing too close or "scalping," allows the hot summer sun to quickly "burn out" your lawn, destroying newly germinated grass which is left unprotected by shade and so weaken the plant structure that it cannot survive competition against weeds and insects. Mower cutting height should be about one and a half inches. Cut when growth reaches two and a half inches. Vary the route of your cutting.



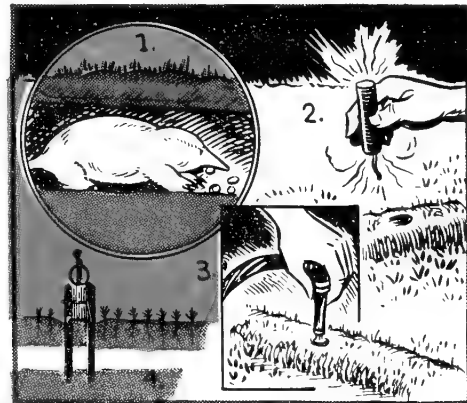
OUR WEED KILLERS DO IT

Get the weeds before they seed. The earlier the start the easier they can be controlled later on. Our selective type 2-4-D preparations sprayed on weeds, now makes a formerly difficult chore a comparatively easy one. 2-4-D sticks to weed leaves and is ultimately absorbed into the root system—the leaves turn brown within a few days and in about three weeks they are dead.



GRUBS CAN DO HEAVY DAMAGE

Beetle grubs feed on grass roots and are extremely destructive, once the infestation is established. Beetles lay their eggs in the ground near the grass roots during the summer months. The hatch (grubs) feed and sever the grass roots during the fall. A lawn turning brown in patches should be examined closely at a three inch depth for grubs. Use our rotenone sprays or poison feed applications to bring them under control.



NEED A MOLE REMOVED

Moles feed on beetle grubs, other larvae and centipedes. They push up the sod and soil during their food search. Sometimes they can be poisoned or gassed out of activity, with specially prepared materials (Figure 2) or drowned out (Figure 3) or trapped, the latter is preferable if he's up close to bulbs or shrubbery. When you've eliminated him, tramp the burrow down thoroughly or it becomes a haven for mice and gophers.



TOO MUCH SUN?

Exposed areas in bright sun tend to "burn out." There is no one kind of seed that will take care of all situations the year round. But there is a best seed or blend for your sunny lawn and we know them. Let us help you plan and grow your lawn.

... OR SHADE?

Here's ordinarily a difficult lawn growing situation. Absence of sufficient sunlight causes many types of lawn seed to quickly die out or even fail to germinate. Wherever this problem exists you need our Special Shade Mixture. These are excellent shade enduring grasses and clovers that have given good results on many shaded lawns here.

SPECIAL NEED?

Parks, playgrounds, and golf courses need their own types of grass . . . all different. We have the right seed for all special uses. Just bring your problem to us . . . we'll furnish the seed you need and the know-how to make it grow.

BUILDING A LAWN

- 1—Spade or plow area to an 8 to 10 inch depth. Pulverize the soil thoroughly.
- 2—Distribute uniformly over the area, a well balanced fertilizer at the rate of four pounds per hundred square feet.
- 3—Work the fertilizer into the soil with a rake.
- 4—Carefully seed with one of our fine blends in the quantity recommended for the specific grass types. Sow half lengthwise and half crosswise for even distribution on a windless day.
- 5—Roll well with a lawn roller to impress the seed into the soil. If the area is a small one use a wide flat board on the seeded area; walk heavily back and forth over it.
- 6—Water well with a fine mist so the seeds do not become dislodged. If the normal moisture is enough to keep the lawn slightly damp do not water it again until the seed has germinated.

BROWNING'S

Lawn Seed

To be sure of having a thick lasting turf, you must sow true turf grasses properly suited to your own soil and climatic conditions. And to be sure of getting such a mixture, buy your seed from a seedsman right here in your own territory.

For years it has been our business to provide exactly the right kind of seed for each particular lawn condition. You can depend on us for the greatest bargain in lawn seed in the long run.

Astoria Bent

Produces numerous root stocks which spread underground and throw up new shoots, making a very thick turf. This Bent has a good color and is excellent for lawns and putting greens. Does not require as much cutting as Creeping Bent.

Seaside Bent

A true creeping Bent. The plant is dwarf, and multiplies rapidly by sending out runners in all directions. With proper watering and care, it makes a strong, enduring turf. If damaged it heals over promptly.

Chewings Fescue

A superb grass to grow in rather shaded areas and even on fairly acid soil and under other unfavorable conditions. Plants grow low, make a dense turf. Often used for putting greens and fairways.

Red Top

Particularly suitable for wet, low spots, as it stands wet weather or even over-flowing, better than other grasses. Also does well on almost any good, rich soil. Often thrives where Blue Grass fails—and therefore makes an excellent supplement for it.

Kentucky Blue Grass

Produces a deep dark green lawn of close thick turf. Maintains its green color until late in fall. Roots are deep, and plants are very hardy.

Domestic Rye Grass

A quick-growing annual, valuable in lawn mixtures as a nurse crop, to keep lawn green while better, slow-growing varieties are becoming established. Succeeds well on almost any soil.

Perennial Rye Grass

A quick growing grass, most suitable for mixtures. Succeeds on almost any soil not water sogged.

White Dutch Clover

Although not a grass, White Clover is very desirable in lawn mixtures because of its rapid, low growth and creeping stems. Valuable as a green cover for poor ground. Succeeds best on moist ground or during wet season.

Other Grasses

Besides the lawn grasses listed here, we can also supply just about any other grasses you may need. We carry a complete line of all varieties that can be successfully grown in this part of the country. Just tell us what you want!

Tested and Proven for the Toledo Area BROWNING'S Finest Lawn MIXTURES

BROWNING'S SUPREME LAWN MIXTURE
BROWNING'S TOLEDO PARKS LAWN MIXTURE
BROWNING'S SHADY SPOT LAWN MIXTURE

More and more the problem of choosing lawn seed has become a local one. It is of prime importance to plant the varieties of grass that best fit your own growing conditions. It has taken years of actual lawn tests in and around Toledo to produce Browning's Lawn Mixtures but we consider the time and work well spent, for in these blends we know we have found the most dependable mixes to produce luxurious growths of grass for a new lawn, a shady area, low wet spots or a whole golf course in the Toledo area.

Come In and Talk Over Your Lawn Problems With Us

GEO. T. BROWNING CO.

613 Monroe St.

Toledo, Ohio

FARM SEED

Dependable Grasses and Grains

Alfalfa—The No. 1 soil builder and restorer. We carry a full range of varieties, adapted to this territory.

Millet—An excellent food for stock and poultry. Also a good green fodder and hay plant. Chokes out weeds.

Rape, Dwarf Essex—Highly recommended for pasture for sheep, cattle and hogs. Makes splendid green feed for poultry. Plant early spring in moist soil.

Sorghums—An excellent soiling crop furnishing succulent feed for milch cows. A large yielding fodder crop. A good range of varieties.

Soy Beans—The crop of many purposes. Excellent for hay, ensilage, grain, and soil improvement. Ground soy beans are as good or better than Oil Meal for mixing with grains for dairy ration.

Vetch—A great producer for hay, pasture or silage. Good cover crop and soil builder. Needs only moderate moisture, grows in almost any soil.

CLOVERS

Alsike—Very hardy. Does better on moist land than other varieties of Clover. Suitable for hay or pasture. Good bee plant.

Medium Red or June—The most valuable of the clover family. Makes two crops the second year. Does not exhaust the soil but enriches it.

Mammoth Red—Also called "Pea Vine" Clover. Grows large and coarse, often used for plowing under to enrich soil.

White Dutch—A very hardy creeping

SEED CORN

Our selection of seed corn is built on an intimate knowledge of the kinds that do best in this locality. We have the best kinds for your particular soil and climate.

More and more, the problem of seed corn is becoming localized as new hybrids are released. It is important to have those hybrids best fitted to your growing conditions.

We have the right hybrids for you! Ask about our selection . . . especially adapted to this region.

Ask for our latest
COMPLETE LIST
of varieties and prices
including many not listed
here.

clover, adapts itself to great variety of soils and climates. Good pasture for sheep or cattle; fine for bees.

White Sweet (Biennial)—Excellent for pasture, hay and a soil improver. Drought-resistant.

GRASSES

Alta Fescue—New all-purpose- all-location grass. Highest yielding grass for pasture-hay-silage. Grows on wet or dry, acid or alkali soil. Takes a year to establish but lasts 20 years or more.

Brome Grass—Drought defying, resistant to frost and extreme heat alike. Very early, and stays green late in fall. Produces abundant apsturance and enormous crops of high grade hay.

Kentucky Blue Grass—Excellent for pasture for all kinds of stock. Very hardy. Roots form tough sod. Requires two years to get well started, so often sown in mixtures with other grasses.

Orchard Grass—Hardy, quick-growing. Gives large yield of excellent hay. May be cut several times during season. Will grow in shady places.

Reed Canary Grass—Especially suited to swampy, over-flowed lands; but thrives on uplands where moisture is abundant. Makes splendid pasture, very early; lasts to late fall.

SEED TREATMENT

More and more the coating of seed with stimulating bacteria is gaining favor with production-wise farmers. We highly recommend seed treatment for higher yields, faster germination and growth. Be sure to ask us about it the next time you stop in.

SEED POTATOES

Our certified stocks are the most economical you can plant. They reduce your hazards to a minimum and give you bigger production with fewer culls.

Red Top—Valuable for most soils. A good permanent grass. It should be grazed close. Grows successfully on alkali lands where other grasses fail.

Rye Grass, Domestic—Fast growing one-year grass. Yields abundantly and matures all in one season. Helpful as a nurse crop to other grasses.

Rye Grass, Perennial—A good pasture grass. Grows quickly and withstands drought reasonably well.

Sudan Grass—The ideal emergency hay and pasture crop for late planting. Never plant until ground is warm.

Timothy—Unsurpassed as a crop for hay. Relished by all kinds of stock, especially horses. Not suitable for permanent pasture. Should not be cut too early or pastured too late in fall.

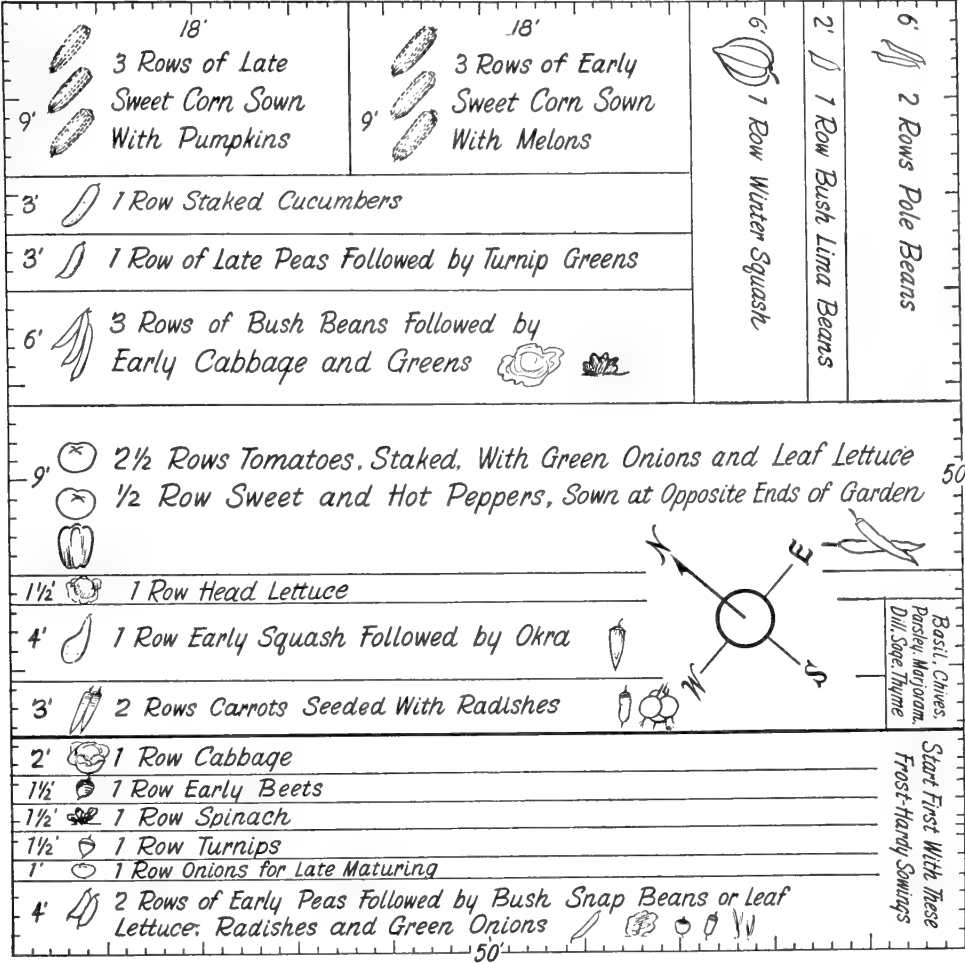
Field and Grass Seed Per Acre And Bushel Weight

	Lbs. per Bu. Lbs. per Acre	
Alfalfa	60	15 to 20
Barley	48	96
Brome Grass	14	15 to 20
Buckwheat	50	50
Clover, Alsike	60	8 to 10
Clover, Medium Red ..	60	10 to 12
Clover, Mammoth Red	60	8 to 12
Clover, Sweet	60	12 to 15
Clover, White	60	5 to 8
Cow Peas, broadcast ..	60	60 to 90
Flax, broadcast	56	25 to 30
Grass, Kentucky Blue ..	14	20 to 30
Grass, Orchard	14	22
Kaffir Corn, broadcast	56	40 to 50
Millet, for hay	50	50
Millet, for seed	50	30
Oats	32	64 to 96
Rape, broadcast	50	6 to 8
Reed's Canary Grass ..	32	4 to 6
Rye, broadcast	56	56 to 84
Sorghum, for fodder ..	50	50 to 60
Soy Beans, broadcast ..	60	30 to 45
Soy Beans, in drills ..	60	60 to 90
Sudan Grass, broadcast	40	20 to 25
Sudan Grass, in drills	40	8 to 10
Timothy	45	10 to 12
Vetches, broadcast ..	60	50 to 60
Wheat	60	90

PLANNING AND PLANTING

LIBERTY GARDENS

FOR MAXIMUM YEAR 'ROUND NEEDS



A SUGGESTED 50' x 50' GARDEN

Planned for a balanced diet for a family of four.

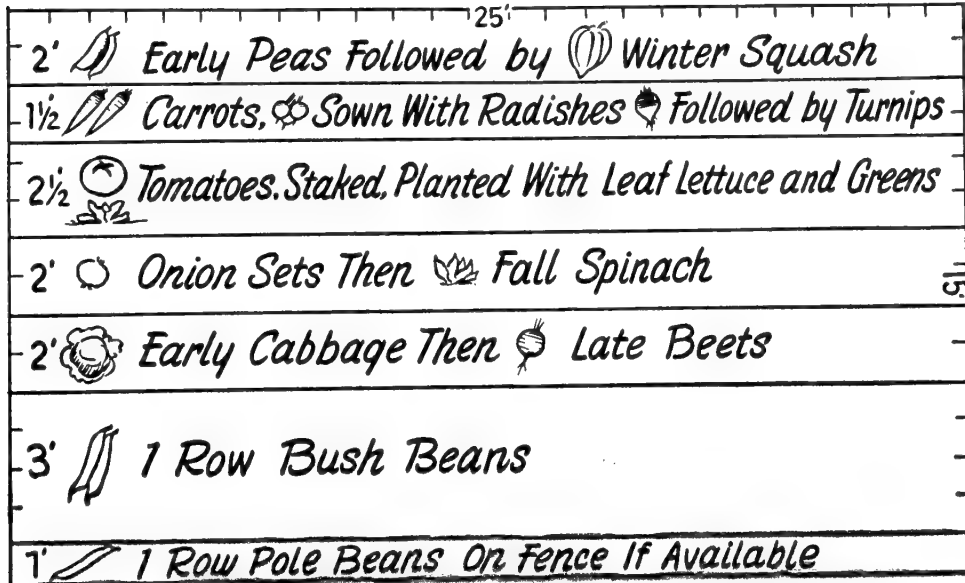
Observe how the tall crops are laid so they will not shade the low growers. At the bottom you will find suggestions that are resistant to late freezes and yet provide early harvest for the types of vegetables planted. A small bed of herbs is suggested also.

The sweet corn is in a square plot instead of a lengthy single row: this gives much

better pollinization—an important factor in getting maximum yields.

For the sake of space conservation the small garden below has no sweet corn. It does offer a good variety of food choices however. If a fence were available on two sides of this garden we would suggest planting the tomatoes so they could be tied up. This would permit more space for the planting of turnips, or parsnips and other items missing in the plan.

PLAN FOR A 25' x 15' GARDEN



Beat Inflation—Plant a Garden

Planning your garden is a highly individualistic matter. Family preferences in food choices vary widely, for that reason the length of rows and choices of varieties are different in every garden. The shape of the plot varies too, rarely do conditions permit a perfectly square garden.

The diagrams at the left are offered as a sound starting point in making up a plan. If a fence adjoins your site, climbing vine crops and tomatoes can be tied to the fence, saving both space and extra work.

Plan for inter-cropping and succession cropping too, so your soil will be working full time, and give maximum production. Following are some additional ideas:

PLAN NO. 3

- Row No.
- 1 Mustard
 - 2 Garden Cress
 - 3 Summer Squash
 - 4 Spinach
 - 5 Spinach
 - 6 Beans—Lima or Green Soy
 - 7 Bush Beans followed by late Lettuce
 - 8 Bush Beans followed by Cauliflower
 - 9 Bush Beans followed by Cauliflower
 - 10 Late Peas followed by late Cabbage
 - 11 Midseason Peas followed by late Cabbage
 - 12 2nd early Peas followed by Rutabagas
 - 13 1st early Peas followed by Brussels Sprouts
 - 14 Carrots, Radishes, followed by Kohlrabi
 - 15 Early Beets followed by Carrots, Radishes
 - 16 Lettuce followed by late Beets
 - 17 Kohlrabi followed by Endive

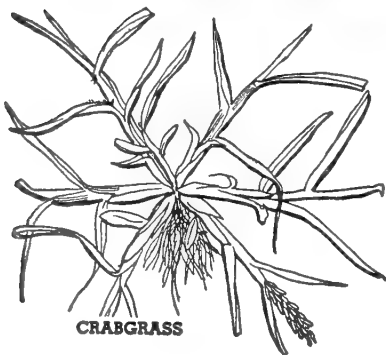
PLAN NO. 4

- Row No.
- 1 Radishes followed by Sweet Corn
 - 2 Green Onions followed by Sweet Corn
 - 3 Tomatoes interplanted with Peas
 - 4 Tomatoes interplanted with Peas
 - 5 Early Cabbage followed by Turnips
 - 6 Beets followed by Cabbage
 - 7 Potatoes or Onion Sets
 - 8 Carrots followed by Bush Beans

PLAN NO. 5

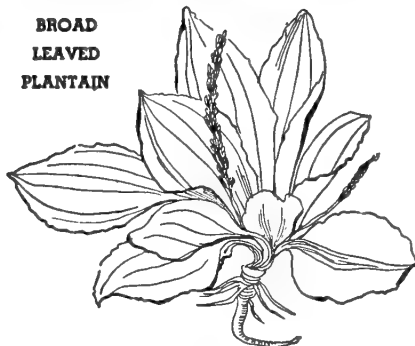
- Row No.
- 1 Sweet Corn
 - 2 Radishes followed by Sweet Corn
 - 3 Tomatoes interplanted with Lettuce
 - 4 Early Peas . . . mid-season Peas . . . late Peas (1/3 row each, planted at 2-week intervals)
 - 5 Early Cabbage followed by Turnips
 - 6 Beets followed by Cabbage
 - 7 Carrots followed by Bush Beans

SOME COMMON LAWN WEEDS



CRABGRASS

BROAD
LEAVED
PLANTAIN



COMMON
CHICKWEED

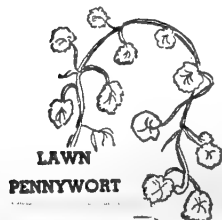


YELLOW FOXTAIL

QUACKGRASS



DANDELION



LAWN
PENNYWORT



GROUND IVY



HEAL ALL



YARROW

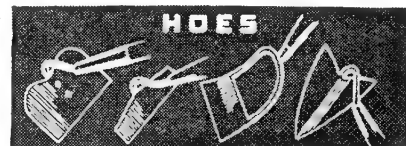
NARROW
LEAVED
PLANTAIN



Proper Tools Can Save You Time and Labor

You cannot do good gardening with poor tools. There are so many good tools to be had today—in various sizes and for all purposes—that the selection of one's tool kit is a necessary and pleasant step toward securing best results.

There are many grades of tools on the market, but it is only a matter of time until you learn that it pays to buy only the best. The cheap tool is stamped out of thin-gauge sheet metal, so that it usually lacks effective weight and adequate strength. It is ordinarily not a one-piece job, and the parts being riveted or welded together, soon work loose. The handles are often made of inferior wood or are not thoroughly seasoned, and therefore, tend to break or warp.



HOES

Every gardener needs a good hoe, and preferably two. While the regular field or garden hoe has millions of friends, the square top onion hoe will do more types of work, weighs less and still do everything the field hoe will. This onion hoe has a blade less than two inches high, hence it does not move a mass of soil. Soil flows over it easily, reducing the effort needed to use it. Because of its narrow width, the end can be used to thin plants in the row. The old idea that the deeper you stirred the soil, the better, has been cast aside, completely. To cultivate in the modern manner you first sharpen the hoe blade, for it is to be considered as a cutting tool.

Draw the sharp hoe blade toward you so the top half-inch of the soil is sliced off. This will uproot or cut off all weeds which may have started, and get under the crust which may be forming in the soil. It will not disturb the plant roots, or stir the soil deep enough to cause the top layer to dry out.



CULTIVATORS

For deeper cultivation, the five-pronged garden cultivator with long handle will do practically everything a wheel hoe cultivator will, though not as rapidly. It is the logical tool for the smaller garden. It should not be used too late in the season, however, after plant roots have begun to spread out between the rows.



FORKS

For breaking up heavy clay soils, many gardeners like a spading fork. The tines go in easier and the clods tend to break easily when pried out.

The choice of a digging tool is a matter of personal preference, but those who have not used the long-handled, round pointed shovel should try this tool. Because of its long handle, it gives greater leverage, which means less work for the back and arms of the digger. While it is called a shovel and can be used for shoveling loose soil, it is equally good for spading and turning over the soil.

To Save Weeding

A big help in reducing the amount of weeding necessary is the use of a green manure mulch on any patch of soil not being used. Whenever you remove one crop from your garden plot and won't use it again for at least several weeks, sow that spot with winter rye. Winter rye is not to be confused with rye grass. The right cover crop to use is the regular cereal grain—winter rye. Plant about 5 lbs. to 1,000 square feet to produce a thick stand that will crowd out weeds. This green mulch or cover crop will take up any unused fertilizers in the soil, and will store them in the leaves of the rye. Then the following spring when the rye is plowed under, this fertilizer returns to the soil and can be used by the succeeding crop. If the ground lies unused, most of this plant food will be lost down the drains. And because a heavy stand of rye will crowd out weeds, you should have a cleaner garden with less work the next year.

Notes On Mulching

Sometimes half-truths are as good as whole ones. The furor created by the book, "Ploughman's Folly," which advocated a trash mulch at the surface, made sense as far as the mulch was concerned. By plowing or digging in the conventional way and then mulching, the home gardener can take advantage of good soil preparation, plus the very real saving in labor that comes from using a mulch.

With the right mulch, there is no need to weed, no need to stir the soil, and once that mulch is applied, the needs for watering (at least in normal seasons) is all but over. This should save hours of valuable time.

Clean straw or dried grass used as a mulch under tomatoes will keep the fruit clean, and in addition will save the labor of staking.

Most gardeners wait too long to mulch. The soil should be moist, but not wringing wet. If spring rains have made the ground soggy, wait until you can cultivate without packing, and then apply. If the ground is dry, soak the soil thoroughly before mulching.

THIS YEAR BEAT HIGH LIVING COSTS—CAN, FREEZE, PRESERVE

It's easy to fight the rising costs of food the year-round, if you plan on canning or freezing and making the most of everything in your garden.

It's important to remember that only clean, sound, strictly fresh food should be canned. All fruits, vegetables, and meats should be canned or frozen **only** when at the perfect stage for cooking.

The two classifications of food for canning are **ACID** and **NON-ACID**. Fruits, ripe pimientos, sauerkraut, rhubarb and tomatoes are **ACID** foods. Vegetables, (except those mentioned above) meats, poultry, game and sea foods are **NON-ACID**.

ON PACKING—Packing the jars should be done carefully in such a way that they are neither crowded nor waste space. Filling jars too full interferes with sealing and also loses liquid. Packing too tightly prevents proper heating and causes spoilage.

THE COLD PACK—To "cold pack" means raw food, or that which has been blanched (scalded and dipped in cold water). All fruit and tomatoes may be cold packed, but all except tomatoes, grapefruit and certain berries are better when hot packed.

THE HOT PACK—Hot packing means filling the jar with hot, partly cooked food. Most fruits, all non-acid vegetables and meats should be hot packed.

ON PROCESSING—Processing (to prevent spoilage), may be done in four different ways: 1. Water bath canners, 2. Pressure cookers, 3. Steamers, 4. Ovens.

The best results have been obtained by hot-water bath and steam pressure. The water bath canner is considered best for processing fruits, juices tomatoes, pickles and preserves.

THE WATER BATH CANNER—This can be done inexpensively by making either a wire rack, or putting a piece of wood at

the bottom of the canner, to keep the jars ½ inch from the bottom. The water should be steaming when the jars are put into the canner. Lower the jars slowly into the water. Processing time is counted from the time the water is actually boiling. **Keep it boiling constantly and at the same rate of speed the whole time the processing is being done.** Remove the jars at the exact time your chart shows, and seal.

THE PRESSURE COOKER — All non-acid vegetables should be processed in a steam pressure cooker. Place jars on rack in a cooker with 1 to 2 inches of water. **Be sure to leave enough space between jars to allow circulation of steam.**

Adjust and fasten lid securely. Don't close the petcock until steam has escaped in a steady stream from 5 to 7 minutes. **The pressure must be kept steady.** Remove from heat when processing time is through and let stand until the gauge is at zero. Open petcock slowly, tilt the lid away from your face. Spread a heavy cloth over the top of the cooker; catch handles of rack through the cloth, and lift out. Seal jars according to direction.

IMPORTANT

This fall when you start to make use of your canned foods, be sure to remember these safeguards.

Boil all canned meats and non-acid vegetables 10 to 15 minutes before tasting. Never taste any canned product when it has a peculiar odor.

If canned goods are to be used for salads or sandwiches, boil and then chill. Reboil left-over vegetables before serving.



Reaping A Health Harvest

Your vegetable garden is chock full of nearly **all** the vitamins and minerals needed for the average person's robust, good health.

Beans, Lima: High in Vitamin B, medium in Vitamin G.

Beans, String: High in Vitamin A, medium in Vitamin B, and C.

Beets, Greens: High in Vitamins A and C.

Cabbage: High in Vitamin C, medium in Vitamins A, B, and G.

Carrots: High in Vitamin A, and medium in Vitamins B₁ and G.

Corn: Medium in Vitamins A, B₁ and C.

Lettuce: High in Vitamin A, medium in vitamin B₁ and G.

Onions: Medium source of Vitamins B₁ and G.

Parsley: High in Vitamins A and C.

Peas: High in Vitamins A, B₁, and G. Medium in Vitamin C.

Radishes: Medium source of Vitamins B₁ and C.

Spinach: High in Vitamins A and C. Medium in Vitamin B₁ and G.

Squash: High in Vitamin A.

Tomatoes: High in Vitamins A and C and medium in Vitamin G.

Turnip Greens: High in Vitamins A, C and G, and medium in Vitamin B₁.

Turnips: High in Vitamin C.

HANDY TIME TABLE FOR PROCESSING

VEGETABLE	PACK	WATER		
		PRESSURE	BATH	
		Pounds	Minutes	Hours
Asparagus	Precook 3 mins. Hot pack	10	40	3
Beans:				
Green & Wax	Precook 5 mins. Hot pack	10	35 to 55	3
Lima & Butter	Precook 5 mins. Hot pack	10	55 to 65	3½
Beets	Cook. Skin. Hot Pack	10	35 to 40	2½
Broccoli and Brussels Sprouts	Boil 3 mins. Hot pack	10	40	2½
Cauliflower	Boil 3 mins. Hot pack	10	40	2½
Carrots	Boil 5 mins. Hot pack	10	35 to 40	2½
Celery	Boil 3 mins. Hot pack	10	35	2½
Corn:				
Cream style	Boil 3 mins. Hot pack	15	70	4
Whole grain	Boil 3 mins. Hot pack	10	70	3½
On the Cob	Boil 3 mins. Hot pack	10	70	3½
Egg Plant	Boil 5 mins. Hot pack	10	55	3
Greens-All kinds	Precook until wilted. Hot pack	15	65	3½
Okra	Boil 2 mins. Hot pack	10	40	3
Parsnips-Salsify	Boil. Skin. Hot Pack	10	35 to 40	2½
Peas:				
Green	Boil 3 mins. Hot pack	10	50 to 60	3½
Blackeyed	Boil 3 mins. Hot pack	10	60	3½
Peppers, Green	Cover with brine. Cold pack			¼
Pimientos	Heat. Skin. Pack, no liquid	10	15	¾
Potatoes:				
Sweet	Precook. Skin. Hot pack	10	120	4
New White	Precook. Hot pack	10	45	2½
Pumpkin and Winter Squash	Precook. Hot pack	15	70	3½
Sauerkraut	Cold pack			½
Summer Squash	Precook. Hot pack	10	45	3
Tomatoes	Cold pack			½ to ¾
Turnips, Rutabagas, & Kohlrabi	Precook. Hot pack	10	40	2½

GUIDE FOR QUICK FREEZING

VEGETABLE	PREPARATION	SCALDING
ASPARAGUS	Prepare right after picking. Cut in 1" pieces or 6" spears. Wash.	3 min.
BEANS, Green	Choose only tenderest beans. Break in 1" pieces or slice.	2 min.
BEANS, Lima	Shell. Prepare within 2 hrs. after picking.	1½-2½ min.
BEETS	Top and peel. Cut ¼" slices or dice in small pieces.	2½ min.
BROCCOLI	Soak in salt water ½ hr. Trim. Split stalks and heads.	Small-3 min. Large-4 min.
BRUSSELS SPROUTS	Select fairly small sprouts.	4 min.
CARROTS	Scrape. Cut in ¼" slices or dice.	3 min.
CAULIFLOWER	Trim. Break into 1" pieces	3 min.
PEAS	Use only tenderest. Wash. Prepare within 2 hrs. of picking.	45-60 sec.
RHUBARB	Use tender stalks. Cut into ¾" pieces.	1½ min.
SPINACH	Use tender greens. Wash.	1 min.
SQUASH, winter	Use firm, hard rind variety. Bake. or steam until done. Scoop out. Place pan in ice water to cool.	none
SQUASH, summer	Cook until done. Do not season.	none
SWEET CORN, on cob	Choose best ears. Wrap separately. Seal ends. Freeze promptly.	7-11 min.
SWEET CORN, cut kernels	Scald. Slice corn from cob. Rinse well, drain and freeze promptly.	7-11 min.
TURNIPS	Choose tender, medium size. Wash well and dice in ½" cubes.	2½ min.

MOON PLANTING GUIDE

Phases and Positions of the Moon in 1952

For time immemorial many farmers and gardeners have timed their planting and weeding by the four phases of the moon and its passage through the belt of twelve constellations which comprise the zodiac. For the benefit of those who use this method to guide their planting times we show here all the necessary information

generally shown in more voluminous arrangements. As seedsmen we cannot vouch for the effectiveness of this method, but we are glad to provide these complete up-to-date tables for those who want them in 1952.

Signs of the Zodiac and Their Accepted Influences

♈ **ARIES:** Tends to dryness, barrenness. Fairly good for cultivating, spraying and weeding.

♉ **TAURUS:** Fairly productive. A good sign for planting root crops particularly potatoes and bulbous plants.

♊ **GEMINI:** Dry and barren. Not good for any kind of planting or transplanting. Kill noxious growths.

♋ **CANCER:** Moist, very fruitful, most productive of the Zodiac. Planting and transplanting should yield good crops. Irrigate, bud, graft, transplant.

♌ **LEO:** Most dry and barren sign. Use only to kill weeds, destroy roots, etc.

♍ **VIRGO:** Moist but barren. Not recommended for planting or transplanting; good for cultivating and destroying.

♎ **LIBRA:** Fairly fruitful. Seed for hay, corn, fodder, etc. Produces vigorous pulp growth, reasonable amount of grain. Good for flowers.

♏ **SCORPIO:** Next to Cancer in productivity. Irrigate but do not dig potatoes.

♐ **SAGITTARIUS:** Generally considered barren but used by many for onions, seeding for hay, destroying weeds, etc.

♑ **CAPRICORN:** Earthly, fairly productive. Similar to Taurus but drier. Bulbous flowers, potatoes, tubers, root crops.

♒ **AQUARIUS:** Somewhat barren. Good only for cultivation and extermination of pests.

♓ **PISCES:** Similar to Cancer so use for same purposes. Very productive. Do not dig potatoes.

When to Plant

The tables at right show when the moon enters each sign of the Zodiac. It also shows the moon's changes.

Under each month, we show first the time at which the moon enters each SIGN (day of the month and hour of the day, Central Standard Time). Then we show the moon CHANGES (day and hour) for each month.

● 1st QUARTER MOON, INCREASING

—During 1st Quarter of Moon plant the following: Asparagus, Broccoli, Brussels Sprouts, Cabbage, Cauliflower, Celery, Corn, Cucumbers, Endive, Kohlrabi, Leeks, Lettuce, Spinach, Barley, Oats, Rye, Wheat.

☾ 2nd QUARTER, MOON INCREASING

—During 2nd Quarter of Moon plant the following: Beans, Egg Plant, Melons, Peas, Peppers, Pumpkins, Squash, Tomatoes, flowers, and cereals.

When possible, plant seed while the Moon is in the fruitful signs of Cancer

(♋), Scorpio (♏), or Pisces (♓). The next best signs are Taurus (♉), Libra (♎) and Capricorn (♑).

☾ 3rd QUARTER, MOON DECREASING

—During 3rd Quarter of Moon plant the following: Beets, Carrots, Chicory, Parsnips, Potatoes, Radishes, Rutabagas, Onions, Turnips, Tubers.

☾ 4th QUARTER, MOON DECREASING

—In 4th or Last Quarter of the Moon turn sod, pull weeds, and destroy noxious growths, especially when Moon is in barren signs, Gemini (♊), Leo (♌), Virgo (♍) or Aquarius (♒).

NOTE: All times shown below are Central Standard time.

JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE
1 ♌ .0:00a	1 ♈ .1:56p	2 ♊ .6:37a	1 ♋ .1:41a	3 ♍ .10:55a	2 ♎ .6:25a
2 ♍ .11:46p	3 ♊ .10:57p	4 ♋ .5:42p	3 ♌ .2:09p	5 ♎ .9:34p	4 ♍ .2:14p
5 ♈ .6:44a	6 ♋ .10:45a	7 ♌ .6:30a	6 ♍ .2:38a	8 ♊ .4:48a	6 ♈ .6:17p
7 ♊ .4:44p	8 ♌ .11:36p	9 ♍ .6:49p	8 ♎ .0:52p	10 ♈ .8:49a	8 ♋ .7:45p
10 ♋ .4:34a	11 ♍ .0:00p	12 ♎ .5:16a	10 ♌ .8:10p	12 ♋ .11:08a	10 ♎ .8:29p
12 ♌ .5:19p	13 ♎ .10:57p	14 ♍ .1:18p	13 ♈ .1:06a	14 ♎ .1:16p	12 ♌ .10:04p
15 ♍ .6:00a	16 ♊ .7:44a	16 ♈ .7:12p	15 ♋ .4:41a	16 ♌ .4:08p	15 ♍ .1:30a
17 ♎ .5:16p	18 ♈ .1:38p	18 ♋ .11:17p	17 ♎ .7:43a	18 ♍ .8:09p	17 ♈ .7:12a
20 ♍ .1:41a	20 ♋ .4:46p	21 ♎ .1:54a	19 ♌ .10:41a	21 ♈ .1:30a	19 ♊ .3:06p
22 ♈ .6:22a	22 ♎ .5:47p	23 ♌ .3:39a	21 ♍ .1:58p	23 ♊ .8:39a	22 ♋ .1:06a
24 ♋ .6:39a	24 ♌ .6:02p	25 ♍ .5:33a	23 ♈ .6:18p	25 ♋ .6:09p	24 ♌ .1:04p
26 ♎ .7:06a	26 ♍ .7:16p	27 ♈ .9:07a	26 ♊ .0:43a	28 ♌ .6:00a	27 ♍ .2:06a
28 ♌ .6:46a	28 ♈ .11:06p	29 ♊ .3:40p	28 ♋ .10:07a	30 ♍ .6:55p	30 ♎ .2:14a
30 ♍ .8:35a			30 ♌ .10:13p		
Changes	Changes	Changes	Changes	Changes	Changes
☾ 3 10:47p	☾ 2 2:06p	☾ 3 7:44a	☾ 2 2:48a	☾ 1 9:58p	☾ 7 11:05p
☾ 11 10:56p	☾ 10 6:26p	☾ 11 0:12p	☾ 10 2:53a	☾ 9 2:12p	☾ 14 2:31p
☾ 20 0:05a	☾ 18 11:57a	☾ 18 8:37p	☾ 17 3:08a	☾ 16 8:40a	☾ 22 2:46a
☾ 26 4:27p	☾ 25 3:16a	☾ 25 2:15p	☾ 24 1:29a	☾ 23 1:31p	☾ 30 7:10a
				☾ 31 3:43p	
JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER
1 ♍ .11:20p	2 ♋ .4:23p	1 ♎ .3:01a	2 ♍ .1:35p	1 ♈ .1:00a	2 ♋ .9:12p
4 ♈ .6:25a	4 ♎ .4:39p	3 ♌ .2:59a	4 ♈ .3:09p	3 ♊ .5:02a	5 ♌ .7:24a
6 ♋ .6:02a	6 ♌ .4:07p	5 ♍ .2:58a	6 ♊ .7:21p	5 ♋ .0:17p	7 ♍ .7:57p
8 ♎ .5:53a	8 ♍ .6:38p	7 ♈ .4:49a	9 ♋ .3:17a	7 ♌ .10:58p	10 ♎ .8:34a
10 ♌ .5:58a	10 ♈ .7:51p	9 ♊ .10:10a	11 ♌ .2:51p	10 ♍ .11:47a	12 ♍ .6:34p
12 ♍ .7:58a	13 ♊ .2:38a	11 ♋ .7:27p	14 ♍ .3:50a	12 ♎ .11:54p	15 ♈ .0:56a
14 ♈ .0:48p	15 ♋ .0:54p	14 ♌ .7:38a	16 ♎ .3:41p	15 ♍ .9:17a	17 ♋ .4:16a
16 ♊ .8:40p	18 ♌ .1:20a	16 ♍ .8:40p	19 ♍ .1:08a	17 ♈ .3:29p	19 ♎ .6:02a
19 ♋ .7:06a	20 ♍ .2:21p	19 ♎ .8:41a	21 ♈ .8:11a	19 ♋ .7:39p	21 ♌ .7:46a
21 ♌ .7:21p	23 ♎ .2:40a	21 ♍ .6:40p	23 ♋ .1:26p	21 ♎ .10:51p	23 ♍ .10:31a
24 ♍ .8:24a	25 ♈ .1:07p	24 ♈ .2:31a	25 ♎ .5:26p	24 ♌ .1:55a	25 ♈ .2:48p
26 ♎ .8:51p	27 ♋ .8:48p	26 ♋ .8:05a	27 ♌ .8:26p	26 ♍ .5:09a	27 ♊ .8:51p
29 ♍ .7:03a	30 ♋ .1:21a	28 ♎ .11:22a	29 ♍ .10:34p	28 ♈ .8:55a	30 ♋ .4:54a
31 ♈ .1:32p		30 ♌ .0:51p		30 ♊ .1:56p	
Changes	Changes	Changes	Changes	Changes	Changes
☾ 7 6:32a	☾ 5 1:40p	☾ 3 9:21p	☾ 3 6:16a	☾ 1 5:14p	☾ 1 6:42a
☾ 13 9:45a	☾ 12 7:29a	☾ 10 8:40p	☾ 10 1:35p	☾ 9 9:43a	☾ 9 7:21a
☾ 21 5:30p	☾ 20 9:19a	☾ 19 1:18a	☾ 18 4:39p	☾ 17 6:55a	☾ 16 7:59p
☾ 29 7:44p	☾ 28 6:02a	☾ 26 2:27p	☾ 25 10:02p	☾ 24 5:34a	☾ 23 1:53p
					☾ 30 11:07p

Notes on FLOWER GROWING

Plants subject to ground pests, such as asters, should have powdered tobacco mixed generously with the immediate topsoil when planted and again just before blooming time. Sulphur and tobacco are usually safe things to mix in the soil around the plant.

Cultivate often until July first and then, if you wish to avoid labor and watering, try mulching with an inch of peat humus or peat moss, keeping this material slightly away from the stem. This can be raked off in the fall or left to be cultivated into the soil.

Stake such tall plants as delphinium at once. Tie a raffia strip to the stake first and then to the plant. Remove all blossoms as soon as they fade to induce a prolonged flowering season. A second flowering can be secured from such plants as Canterbury bells by this method. Cut delphinium stalks to the ground after flowering to get new bloom stalks. Pansies bloom continuously if not allowed to seed.

Divide your perennials. Most perennials must be divided every 3 or 4 years. Cut away all the dead roots and stalks, save the best portions, and start afresh.

Flower bed preparation. A good border needs a well prepared subsoil. Dig deep and condition the subsoil just once, and you needn't bother about it again for many years. For this happy situation, break up heavy subsoil with sand, peat moss, humus,

or lime. Top this off with fine loam. The double-dug bed will be higher than before, but will soon settle.

Removing Flowers

The gardener can lengthen the blooming season of all annuals and some perennials by removing old flowers as soon as they fade, and preventing the plant from going to seed. Delphiniums and Canterbury Bells will usually respond to this treatment by producing a second crop of flowers in fall. Cut and remove hollyhock, fox-glove, phlox and delphinium stalks as fast as they fade. Burn them to keep down mildew and black spot.

Window Boxes

There's nothing finer than window and porch boxes to make a house look "lived in" and gay.

The necessary boxes may be bought ready-made, or constructed at home. Redwood or cypress are the best lasting materials, but ordinary yellow pine will do nicely if well painted. Paint at least two coats, and use brass screws instead of nails to joint the boards.

Drainage of flower boxes is important. Use about two inches of coarse gravel at the bottom. Cover this with a layer of sand, and then with good, rich soil.

Fertilizing may be done with liquid manure, but commercial plant tablets are even better, and much easier to apply.

Plants suitable for window boxes are quite numerous. Among the best are petunias, nasturtium, ageratum, candytuft, dwarf marigold, cornflower, babysbreath, verbenas, sweet alyssum, vinca.

For shaded boxes vinca, viola, pansy, and English daisy will be satisfactory. If boxes are exposed to hot south sun a selection of petunia, dwarf marigold, small zinnia, and portulaca may be used.

Watering should be carefully watched as the boxes dry out very rapidly when the plants have reached a good size and the roots are filling all of the soil.

Pinching Back Flower Plants

If sturdy, stocky plants are wanted, they will need "pinching back." When five or six pairs of leaves have formed, pinch out the top, leaving two or three pairs of leaves on the stem. New shoots will come where the leaves join the stem.

Sometimes a second pinch can be made, when these new shoots in turn have formed four or five pairs of leaves, leaving two pairs on each. Pinching increases the numbers of flowers, though sometimes it decreases their size.

Petunias particularly need pinching back if they are to remain short. Towards the end of the flowing season, after Petunias have grown long and lanky, they can be cut back to within an inch or two of the ground and they will throw out new growth. If given a light feeding of mixed fertilizer, these rejuvenated plants will often bloom as well as younger plants early in the season.

on VEGETABLES

Correcting Acid or Alkaline Soils

Acid soil conditions may be corrected by the use of lime, preferably as ground limestone, which has a longer effect. However, do not apply lime unless it is really needed. A good check on the need for lime is the way your beets grow. Usually a soil that will grow good beets contains enough lime. If you have trouble with beets, and clovers do not grow well in your vicinity, it will pay you to have your soil tested. (We have soil test kits that will show you the right amount of lime to apply.)

Alkaline soil conditions may cause bleaching and stunting of plants. This can be remedied by using soil sulphur or gypsum. Here, again, caution should be used to find out, by soil tests, the right amount to use for your particular soil and crops.

Most garden plants do best in a soil that is neither strongly alkaline or acid but nearly neutral. A soil test of pH 6.0 to 7.0 is ideal, for most crops.

Storing Vegetables

Successful storage depends upon (1) selecting vegetables of good quality; (2) picking them at the proper stage of maturity; (3) having the proper temperature and the right degree of humidity in the storeroom. The desirable stage of maturity varies with the crop. Cabbage, onions, squashes and pumpkins will not keep well unless fully

ALL

matured. Beets, carrots, parsnips, turnips and salsify should not be allowed to become fully matured, as they are likely to become woody.

Best storage conditions can be summarized thus: cool and moist—beets, carrots, salsify, turnips, winter radishes and celery; cool and moderately moist—cabbage and potatoes; cool and dry—onions and dry beans; warm and dry—squashes, pumpkins and sweet potatoes.

A dirt floor is best and, if humidity is low, water can be sprinkled on the floor. Root crops can be stored in boxes of sand or soil in the basement and kept just moist.

Beets, Carrots, Turnips, Winter Radishes—Do not wash. Pack in loose moist sand or fine moist soil. Store in unheated cellar, or in ventilated room away from heat.

Cabbage—Roughly trim heads, cut off roots. Store in temperature of 40 to 60°, with high humidity or cover heads with moist soil or sand.

Celery, Kale, Chinese Cabbage, Endive, Leeks—Store in trenches outdoors or in boxes of soil in basement. Outdoors must be covered with straw to prevent freezing.

Squash, Pumpkins—Harvest as they mature, leaving 3 to 4" of stem. Cure for a few days at 80 to 85°. Store in dry place.

Peas, Beans—May be picked off plants or the whole plant pulled and placed in dry airy place to cure. After thoroughly dried,

shell, clean, sort and store in jars or cans in cool, dry, dark place.

Onions—Pull as soon as most of the tops fall over. Place in racks or spread out on dry wooden floors—or hang in dry airy place. Store in dry well-ventilated place at a temperature just above freezing.

Parsnips, Salsify, Horseradish—Not injured by freezing, and may be left in the garden, or stored in moist soil or sand in cool building.

Potatoes—Should be kept in slatted bins for ventilation and left uncovered. Protect from strong light. Keep longer at 36 to 40°, but cook better if stored at higher temperature.

Sweet Potatoes—Dig as they mature or after first killing frost. Sort them as dug, and place in crates. Cure for two weeks at 80 to 85°F, before storing. Best storage temperature 50 to 55°.

How to plant fine seed

In planting fine seed, tear off one corner of the packet, if Rootone is used, drop in a pinch and shake. The seed can be tapped out of the torn corner of the packet one at a time. Fine seed is often mixed with dry sand so that it will spread out better, but this will only work if seed is not more than twice the size of the sand grains.

Large seeds should be poured out of the packet into a cup or bowl so that they can be dropped individually into the furrow. Beans and peas should be treated with a legume inoculation before planting, even if this was done last year. Improved legume cultures are constantly being propagated in the laboratories and give superior results to natural inoculation.

THIS YEAR MAKE IT A GLAD YEAR, REGARDLESS

Gladiolus growing has become more and more popular in recent years and rightly so, too, for here is one of the easiest of glamorous summer flowers to grow. They are ideal for both cutting and landscape ornamentation. A thousand years ago they were known in Africa as sword lilies. Though they were then quite small, their striking beauty encouraged cultivation. In the past three or four decades Americans have done more to propagate and introduce new glads than any other country.

Following are instructions for planting a glad garden particularly for cut flowers:

Soil and Preparation—Select a site where your glads will receive full sun most of the day, and far enough away from heavy rooted trees and bushes so that competition for soil nutrition is eliminated. The soil should preferably be a slightly acid, sandy loam of about pH 6.5 that drains well. Ask us about soil testing.

Plow or spade at least eight inches deep; deeper if practicable, because friability of soil texture gives better drainage. Work the area completely free of clods. Dig trenches 8 inches wide and deep. (See illustration below) dividing rows 18 to 36 inches apart; give yourself room to work. Cover the bottom of the trench with humus if available, then cover humus with a quarter inch layer of sand. Do not allow manure or other fertilizers to come in direct contact with your bulbs.

Planting—Depth of planting is contingent upon bulb size and soil type: large bulbs 4 to 6 inches deep; shallow in heavy soils deeper in light soils. Plant small bulbs 2 to 3 inches deep. Planting glad bulbs too shallow will cause them to topple or too deep retards growth. Set bulbs firmly in a zig zag pattern about six inches apart if large bulbs, or 2 to 3 inches for small ones. Plant at 10-day intervals for a succession of blooms.

After bulbs have been covered with three-fourths of the dug soil, uniformly apply a well-balanced fertilizer at the rate of four pounds to each hundred feet of row. Finish filling in the trench after the first shoots appear, leaving the soil quite loose around them.

Watering—is important, at least once each week, and particularly after the fourth leaf shows. A side dressing of fertilizer at this time will be helpful. At least an inch of water over the entire garden is necessary if normal rainfall is inadequate.

Cultivation—If it is available, a mulch covering of salt hay or weed-free straw will go a long way toward beating this problem. Cultivate your rows frequently to keep the soil loose and free of weeds. Two inches deep is usually sufficient.

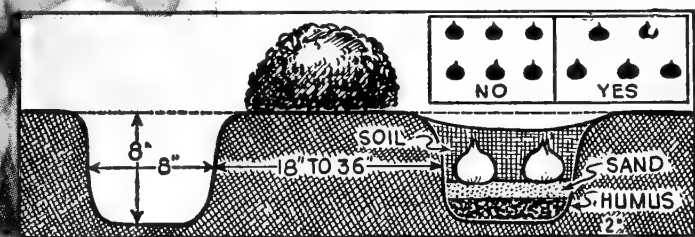
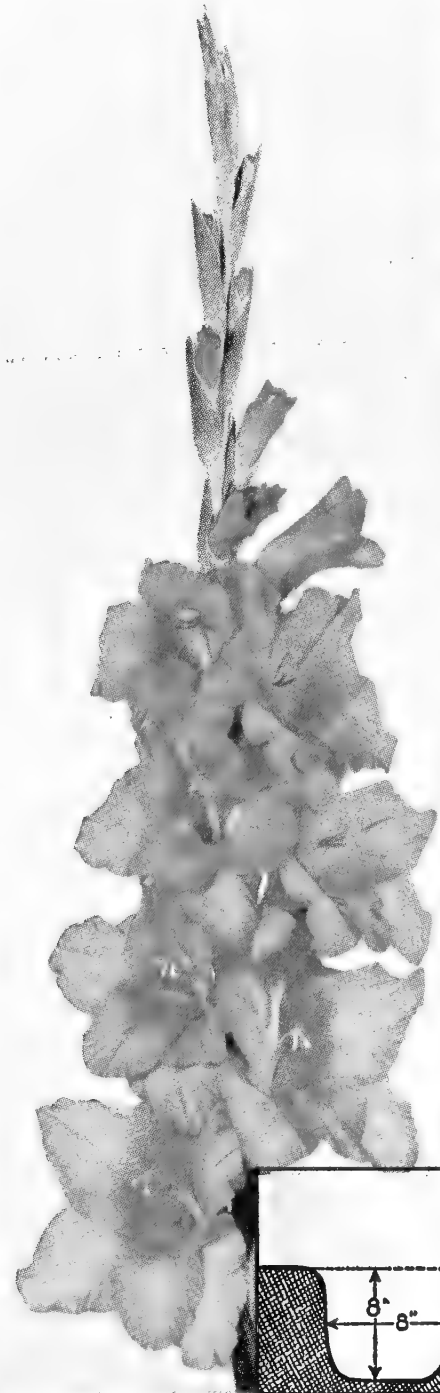
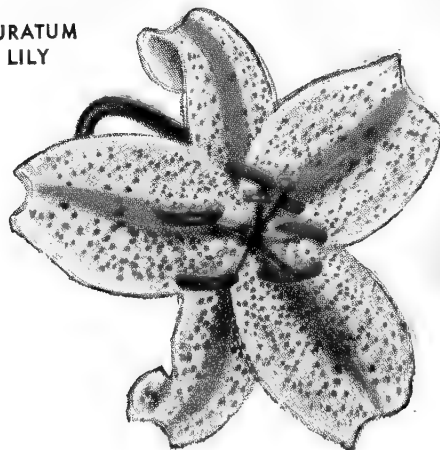
Insect Control—It is wise not to delay your weekly dusting or spraying program after the sixth leaf has appeared. D.D.T. dust or spray is almost universally used today. A 5% dust is quite effective. Spray should be applied in a fine mist under heavy pressure. Ask us about our new insecticides and sprayers for glad insect control.

Cutting—The cool hours of early morning are best for cutting which should be done when one or two florets are fully open. Use a sharp knife and slice diagonally, leaving four or five leaves on the spike if you want the bulb to fully mature.

For Exotic Beauty - Lilies

Next to orchids, modern lilies are now the most exotic of flowers. For the complete flower garden this year, lilies well deserve a place.

AURATUM LILY

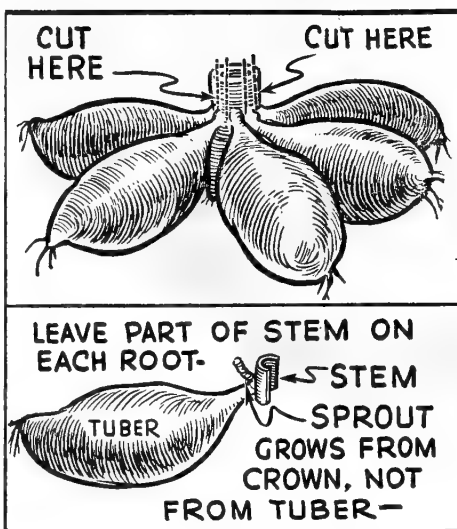


How to Grow Dahlias

Perhaps our most spectacular fall flower, the Dahlia should not be planted too early, as the flowers will not do well in warm weather. Do not, however, keep tubers later than June 1st, since by that time they usually start shriveling and may be injured if kept later. Dahlias need plenty of potash and phosphorus. If you apply the 25 to 30 lbs. of mixed fertilizers recommended for general use before planting, then additional feeding of potash and phosphorus will still be needed to produce firm tubers that will keep over winter, healthier plants and better bloom.

Leaf hoppers which carry disease and which also injure the plant by sucking juice from the leaves and stems are easily controlled by regular dusting or spraying with D.D.T. Mulching with straw, excelsior or some other airy, light material will help keep the soil moist and cool. Don't use leaves or grass clippings that mat down and pack—they hold in too much moisture. Horticultural vermiculite is the perfect winter

To Divide Dahlia Roots



storage medium for dahlia tubers. Dry the freshly dug tubers in the sun for several hours. Then cover them completely with dry vermiculite. They can't freeze in it. They won't shrivel or mold.

Bulbs AND Tubers

FOR SPRING PLANTING

GLADIOLUS

BAGDAD—Smoky old rose, deeper at edge of throat, lighter in throat. 6 to 8 immense blooms open at one time.

BEACON—Clear bright scarlet, with large creamy throat blotch. 8 to 10 medium florets, moderately ruffled.

BIT 'O HEAVEN—Very nice orange with yellow throat. Opens 9 to 12 medium sized blooms on tall spike.

BLUE BEAUTY—Light blue, edges of petals lined with violet-blue. Throat somewhat lighter on upper petals.

BURMA—Deep reddish rose. Heavily ruffled blooms. 8 ruffled florets of heavy substance on a straight spike. One of the best of all glads.

ELIZABETH THE QUEEN—Clear mauve-ruffled flowers with dark lines in the throat. Large.

ETHEL CAVE-COLE—Light pink with deeper pink throat. Large, wide open florets. Fine propagator.

GOLD DUST—Large. A fine soft clear early yellow. Opens 5 to 6 blooms at a time. A beautiful cutflower.

HAWKEYE RED—Large. Red Sport of Vagabond Prince. A bright red with small blotch of darker red on lip petal. 8 to 10 well placed large sized blooms open at a time.

KING LEAR—Clear deep reddish purple with silver line on edge of petals.

LEADING LADY—Cream white. Very large florets on tall spikes.

MARGARET BEATON—Huge snowy white florets with a very small vermilion-pink blotch on the throat.

MARGARET FULTON—Medium. Clear soft rich dark salmon. A beautiful shade. 6 to 8 perfectly placed medium sized florets open at a time.

MISS WISCONSIN—Brilliant rose-pink. Opens to 8 large blooms on a medium height spike. Distinctive color makes it a class by itself.

NEW EUROPE—Large. Vivid orange red with a small purple stripe in throat. 8 to 10 magnificently shaped florets open at a time.

PICARDY—Giant. Soft shrimp pink, with a blotch of light flesh pink shading to shrimp pink at edges.

SNOW PRINCESS—New fine white of good size and form. Many open blooms, perfectly placed. Stems never crook.

SPOTLIGHT—Large. Clear deep yellow with small scarlet blotch in throat. Opens 6 to 8 florets on a long stem.

TIVOLI—Soft rose-pink, lighter in throat. 8 to 10 large florets open on a tall upright stem. Blooms well placed.

VAGABOND PRINCE—Large. An iridescent garnet-brown, lighter in upper throat, and with a small blotch of glowing flame scarlet on lip petal.

WHITE GOLD—Giant. Very large clear light cream shading to a golden shade in throat. 5 to 6 huge well placed blooms open on a long head.

DAHLIAS

(I.D.: Informal Decorative.

F.D.: Formal Decorative)

A. D. LIVONI—(Show type) Beautiful shade of deep pink, free flowering and ideal for cutting.

AVALON—(F.D.) A fine garden variety. Profuse bloomer with rich large lemon-yellow blooms.

COMMANDO—(F.D.) Clear shade of deep lavender. One of the finest.

GALLANT FOX—(F.D.) Brilliant dark red. A good commercial variety.

JANE COWL—(I.D.) Lovely buff and old gold shading to a salmon center. One of the best for cutting.

JERSEY'S BEAUTY—(F.D.) Glorious clear pink. One of the finest ever produced. Marvelous for bouquets.

MAUDE ADAMS—(Show Type) White blending to rose pink. Pleasing uniform blossoms.

MRS. I. DE VER WARNER—(F.D.) A beautiful orchid pink. Lovely large flowers on long strong stems.

MICHIGAN WHITE—(Semi-Cactus) Pure white. The most prolific blooming cut-flower white.

MINIATURE DAHLIAS—Lovely 3- to 4-in. blossoms just like the large ones in form and shape. All have good stems. A wide range of colors.

POMPON DAHLIAS—Charming "button" dahlias that require little care. Gorgeous cut flowers.

ROSY DAWN—(Ball type) A beautiful red-rose and yellow.

CANNAS

KING HUMBERT—(Orchid-flowering). Orange-scarlet with bright red markings; deep bronze foliage. 4 feet.

PRESIDENT—Immense bright red in large clusters. Green foliage. 4 feet.

HUNGARIA—Large dainty rose-pink, frequently edged cream. 4 feet.

WINTZER'S COLOSSAL—Largest flowering. Vivid, blazing scarlet.

CALADIUM

FANCY-LEAVED—Rich ornamental leaves marked, veined and striped with white, pink and dark red.

ELEPHANT'S EAR—One of the largest ornamental plants for beds and borders. Huge green leaves.

LILIES

Few flowers provide such regal beauty as lilies, and few are as hardy. Let us suggest the varieties that will thrive in your garden.

TUBEROSES

One of the most fragrant of all flowers. Tall spikes of white blooms.



Glads Like a Bank Account Says Old Gardener



Most gardeners plant their glads in wide orderly rows in open areas to make cutting and cultivation easier, but there's no law against using them as borders for mixed flowers. Because the straight lines make for erectness and formality—I like to see them planted where there's a green, bushy background such as peony bushes—that way it helps to break the vertical pattern. They're nice along low walls, too. An old stunt is planting glads with iris because both have swordlike leaves. When the true leaves develop; (they're about six inches high at this point) start a weekly D.D.T. spraying program; it's the best insurance I know to control those destructive glad thrips. Growing flowers from bulbs and roots is one of the most rewarding of hobbies. Because glad bulbs multiply each year and return additional bulbs and bulb-lets to the grower it is like a bank account returning interest on your deposit. That's true of dahlia roots, also.

Flower Seeds

FROM THESE PACKETS FLOW
THE FINEST IN THE WORLD

KEY TO SYMBOLS

The symbols below the name of each flower give you the following information. (a)—Annual (b)—Biennial (hp)—Hardy Perennial.

The Culture Number shown for each variety refers to the "How to Grow" information on page 38.

AGERATUM

(a) Culture I, 4-9"

BLUE PERFECTION—A deep amethyst blue. Grows to 9 inches high.

MIDGET BLUE—Small 4-inch plants are covered with azure blooms. Pkt. 25c.

ALYSSUM

(a) Culture II (hp) VI, 4-6"

CARPET OF SNOW (a)—Easily grown dwarf annual. Fragrant snow white flowers last from early summer until frost.

VIOLET QUEEN (a)—Deep violet highlighted by white in center.

SAXATILE (hp)—Dwarf perennial. Golden flowers in spring. Pkt. 15c.

ANCHUSA

(a) Culture I, 2'

BLUE BIRD—Bushy plants with sprays of blue, white-eyed flowers. Pkt. 15c.

ANTIRRHINUM—Snapdragon

(a) Culture I, 1 1/2-3"

TALL GIANT, LARGE FLOWERED—Large 3 foot spikes, huge flowers. Pkt. 15c.

LEMONADE—Clear primrose-yellow. Long, strong stems. A double snapdragon which forms extra petals in each floret. Pkt. 50c.

MAXIMUM—Tallest kind. All colors. Handsome and erect. Pkt. 25c.

SUPER-MAJESTIC Giant Flowered—Semi-tall to 2 feet. Large garden flowers. Pkt. 25c.

TETRA—Immense flowers in many fine colors. Many spikes. Mixed. Pkt. 25c.

AQUILEGIA—Columbine

(hp) Culture VI, 2 1/2"

MRS. SCOTT ELLIOTT'S LONG SPURRED—Large colorful blooms. Pkt. 15c.

ARABIS—Rock Cress

(hp) Culture VI, 1'

Creeping plants with small flowers in early spring. Fine for edging. Pkt. 15c.

ARCTOTIS—Blue-Eyed African Daisy

(a) Culture I or II, 3'

GRANDIS—Two-inch daisies of pearly white with bluish center. Pkt. 15c.

ARMERIA—Thrift

(hp) Culture VI, 1 1/2'

Dwarf rock plants with grassy foliage and globular flowerheads. Pkt. 25c.

AUBRIETIA—Purple Rock Cress

(hp) Culture VI, 6"

A creeper with large colorful flowers in spring. Ideal with bulbs. Pkt. 15c.

ASTER

(a) Culture 1 1/2-2 1/2'

WILT RESISTANT SUPER GIANT, MIXED—An entirely new class of base branching, heavy stemmed, fluffy ostrich feather flowers. Packet 25c.

AMERICAN BRANCHING—Four inch double flowers of compact form. Brilliant. Pkt. 15c.

CALIFORNIA GIANTS—Large double with curled petals. 3' plants. Pkt. 15c.

GIANT CREGO Wilt Resistant—Large 4-inch flowers with fluffy effect. All colors. Pkt. 15c.

PRINCESS—Three-inch flowers are compact crested center. Mixed. 15c.

QUEEN OF THE MARKET—Early. Short plants. Compact double flowers. Mixed. Marvelous blend of colors. Pkt. 15c.

BALLET—Lovely new four inch, double flowers. Mixed. Pkt. 20c.

SUNSHINE—4" flowers. Loose row of petals, quilled center. Pkt. 25c.

BABY BLUE EYES—SEE NEMOPHILA

BABY'S BREATH—SEE GYPSOPHILA

BACHELOR'S BUTTONS—

Centaurea, Cornflower

(a) Culture II or IV, 3'

BLUE BOY—A fine, clear blue. Flowers are large. Colors intense.

PINKIE—Lovely rose pink.

RED BOY—Bright crimson.

SNOW MAN—Snow white.

JUBILEE GEM—Dwarf, 1' plant. Large, frosty blue blooms. Pkt. 15c. **Mixed**—All colors.

BLANKET FLOWER—SEE GAILLARDIA.

BALLOON VINE—

Love in a Puff

(a) Culture I, 10' to 15'

A clear, free-growing vine with small white flowers, and balloon-like seeds.

BALSAM—Lady Slipper

(a) Culture II, 1 1/2-2'

MIXED—Double Camellia-like flowers all summer on bushy plants. Pkt. 15c.

BELLIS PERENNIS—SEE DAISY, ENGLISH.

BLUE LACE FLOWER—SEE DIDISCUS.

BRACHYCOME—SEE DAISY, SWAN RIVER.

BURNING BUSH—SEE KOCHIA.

BUTTERFLY FLOWER—SEE SCHIZANTHUS.

ALL FLOWER SEEDS

10¢

PER
PACKET

UNLESS OTHERWISE NOTED

CALENDULA—Pot Marigold

(a) Culture II or IV, 1½'

SUNSHINE—Golden flowers with drooping petals. Odorless. Pkt. 15c.

SUNSET SHADES—Large flowers in shades: yellow and orange. Pkt. 15c.

PACIFIC BEAUTY, PERSIMMON—Large, bright, orange, double. Pkt. 15c.

MIXED—Fine mixture of many colors and types. Good for cutting.

CALIF. POPPY—SEE ESCHSCHOLTZIA

CALLIOPSIS—Tickseed

(a) Culture II or IV, 1-3'

DWARF MIXTURE—One-foot plants with many colors of yellow and red.

TALL MIXTURE—A splendid range of various colors on tall plants.

CAMPANULA—Canterbury

Bells

(b) Culture VIII, 2'

SINGLE—Large bell-shaped flowers in many colors. Graceful plants. Mixed.

DOUBLE—Fine double flowers in blue, pink and white. Mixed. Pkt. 15c.

CUP AND SAUCER—Bell-shaped. Saucer of petals at base. Mixed. Pkt. 15c.

CANDYTUFT—Iberis

(a) Culture III, 1'

WHITE HYACINTH—Large conical spikes of snowy flowers. Fine for edging.

UMBELLATA MIXED—Umbrella-like flower clusters. Many fine colors.

CARDINAL CLIMBER—

Imp. Cypress Vine

(a) Culture III, 10-15'

Slender vine with bright green fernlike leaves. Red flowers. Pkt. 15c.

CARNATION

(a) Culture I or VIII, 18"

CHABAUD'S GIANTS—Large double flowers with sweet fragrance. All colors. Flower in six months. Pkt. 15c.

CASTOR BEAN—Ricinus

(a) Culture III or VII, 10'

ZANZIBARIENSIS—Tall, strong plant for bold effect. Large lobed bright green leaves. Excellent for backgrounds. 15c.

CELOSIA—Cockscomb

(a) Culture I or II, 1-3'

SHADES OF RED—Low grower with large crested heads, as rooster combs.

PAMPAS PLUMES—Tall, feathery heads in new bronze and sunset shades. Pkt. 25c.

CENTAUREA—SEE BACHELOR'S BUTTONS

CHRYSANTHEMUM

(a) Culture II or IV, 1½'

SINGLE PAINTED DAISY, MIXED—Showy daisy-like flowers. Rings of red, yellow, on white, red or yellow flowers. 15c.

CLARKIA

(a) Culture II or IV, 2'

DOUBLE MIXED—Large double flowers in many gorgeous colors. Graceful plant. Does well in light shade.

CLEOME—Spider Plant

(a) Culture II or IV, 3-4'

PINK QUEEN—A tall plant with many pink flowers. Neat foliage. Pkt. 15c.

COCKSCOMB—SEE CELOSIA

COREOPSIS

(hp) Culture VI, 2'

SUNBURST—Large, double flowers of rich golden color. Fine for cutting. Sturdy, good grower. Pkt. 15c.

COLUMBINE—SEE AQUILEGIA

CORN FLOWER—SEE BACHELOR'S BUTTON

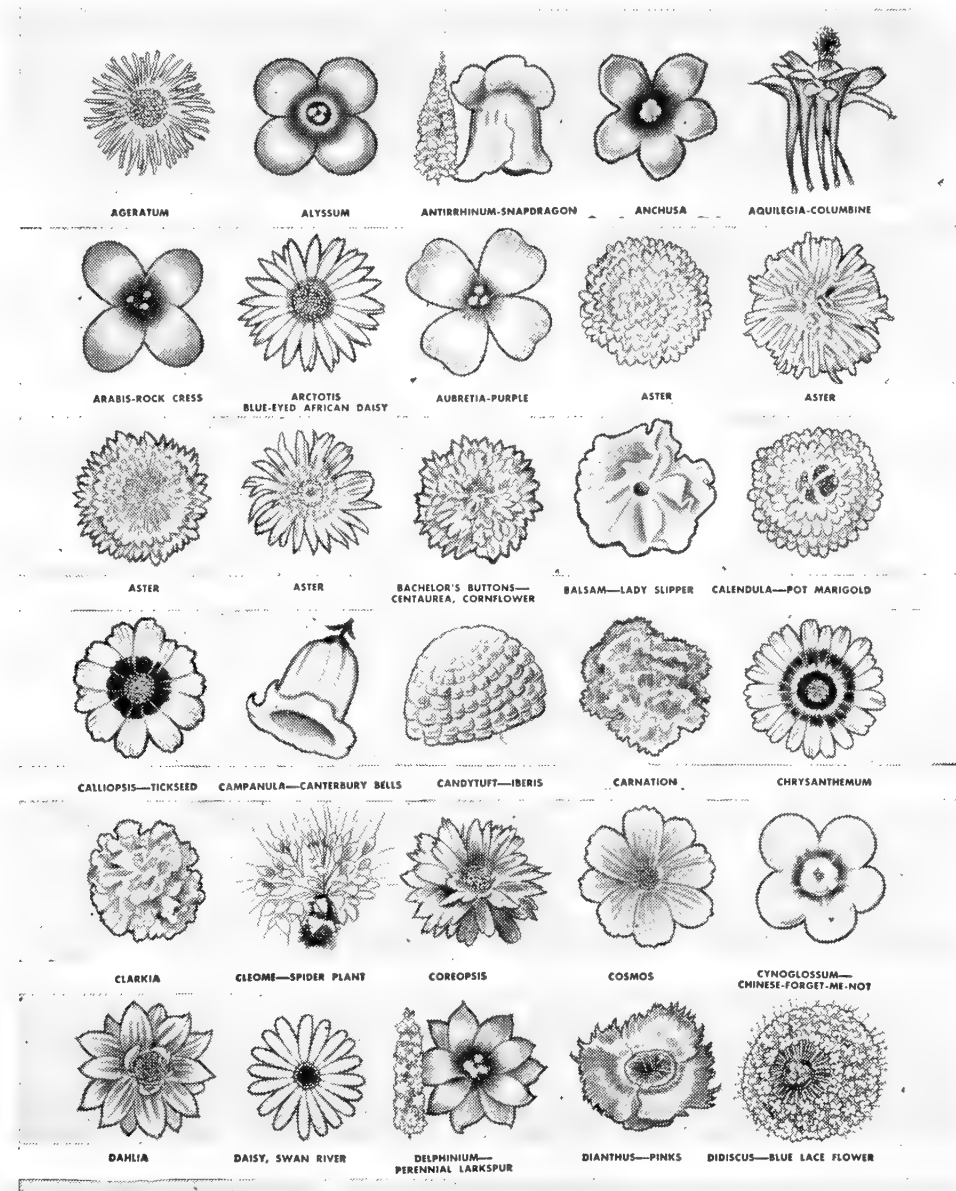
how? when?

HOME GARDENING GUIDE

where? why?

A DIGEST OF FLOWER SHAPES, SIZES and COLORS—The thirty thumbnail illustrations shown below are an alphabetically arranged brief guide for the uninitiated

flower grower. These portray the shape of individual blossoms only. Many of them grow in large clusters and spikes, which space does not permit.



Descriptions and names of the flowers shown are listed below with the following information: Usual flower height, flower diameter and color; also if it grows in floret spikes or clusters.

For Example: **CLARKIA**—the first flower on the left hand side of the 5th row—2' (usual height), 2½", flower diameter, then following the many colors it achieves. Since **CLARKIA** is a single flower, rather than a floret spike or cluster, this information was not included.

1st Row: **AGERATUM**, 4-9", ½", white, lavender, blue; **ALYSSUM**, 4-6", white; **ANTIRRHINUM-SNAPDRAGON**, Floret spike, 1½-3', 1½", white, yellow, red, purple; **ANCHUSA**, Floret cluster, 2', ½", Bi-color, blue and white; **AQUILEGIA-COLUMBINE**, 2½', 2½", blue, yellow, pink, orange, purple.

2nd Row: **ARABIS-ROCK CRESS**, Floret cluster, 1', ⅓", white; **ARCTOTIS-BLUE-EYED AFRICAN DAISY**, 3', 3", Bi-color white and blue; **AUBRETIA-PURPLE ROCK CRESS**, Floret cluster, 6", blue, purple, lilac; **ASTER (American Branching)**, 2½' 3½-4", white, pink, purple, numerous varieties; **ASTER (El Monte)**, 2½', 6-8", crimson.

3rd Row: **ASTER (Princess Bonnie)**, 2½', 3-3½", Bi-color, yellow and rose; **ASTER (Sunshine)**, 2½', 4", yellow; **BACHELOR'S BUTTONS-CENTAUREA, CORNFLOWER**, 3', 1½", blue, white, red, orange, purple; **BALSAM-LADY SLIPPER**, 2', white; **CALENDULA-POT MARIGOLD**, 1½', 1½", orange, yellow.

4th Row: **CALLIOPSIS-TICKSEED**, 1-3', 2½", Bi-color, yellow, red, blue; **CAMPANULA-CANTERBURY BELLS**, Floret spike, 2', ½", white, blue, purple, yellow; **CANDYTUFT-IBERIS**, Floret cluster, 1', rose, lavender, white; **CARNATION**, 18", 2-3", white, red, yellow, salmon, crimson; **CHRYSANTHEMUM (Painted Daisy)**, 1½', Bi-color, white, red and yellow.

5th Row: **CLARKIA**, 2', 2½", pink, rose, crimson, purple, white, red; **CLEOME-SPIDER PLANT**, 4', salmon, pink; **COREOPSIS**, 2', 2½", yellow; **COSMOS (Sensation)**, 3-4', 4-5", white, pink, red, yellow; **CYNOGLOSSUM-CHINESE FORGET-ME-NOT**, Floret cluster, 15", ⅓", blue.

6th Row: **DAHLIA (Unwin's)**, 14", mixed; **DAISY, SWAN RIVER**, 10", 1", Bi-color, red, blue and white; **DELPHINIUM-PERENNIAL LARKSPUR**, Floret spike, 5', Bi-color, blue, white, and yellow; **DIANTHUS-PINKS**, 1', Bi-color pink, maroon, crimson and white; **DIDISCUS-BLUE LACE FLOWER**, Floret cluster, 2½', 2-3", blue.

**ALL PRICES
IN THIS CATALOG
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WITHOUT NOTICE**

HOME GARDENING GUIDE

FOR FLOWER GARDEN PLANNING

KEY—For classification of flowers by purpose, location, etc., see the second column below. The meaning of the key letters in this column follows:

- | | | |
|-------------------------------|------------------------------------|------------------------------|
| A—For dry, hot locations | E—For edging. | I—For their fragrance. |
| B—For a succession of blooms. | F—For the rock garden. | J—For porch or window boxes. |
| C—For shady locations. | G—For their foliage. | K—Climbing vines. |
| D—For poor soil. | H—Everlasting for winter bouquets. | L—For backgrounds. |

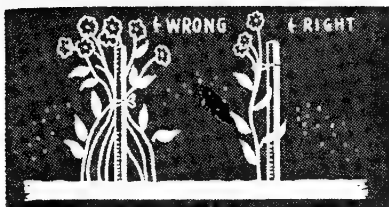
PETUNIA, Ballerina
All American 1952
Honorable Mention

ZINNIA, Persian
Carpet—Honorable
Mention 1952 A.A.S.

ASTERS
Wilt-Resistant
Super Giants

	Height (Inches)	Suitable for	Average Days to Germinate	Approx. Time of Bloom	Shape of Plant
Ageratum	4-12	E F J	5-10	10 Wks.	bushy
Alyssum, Sweet	2-12	B C D E F I J	5-10	6 Wks.	spreading
Antirrhinum	12-60	C I L	20-25	3-4 Mos.	bushy
Acquilegia	18-36	C E F	15	3 Mos.	branchy
Balsam	14-20	A E	10-12	6 Mos.	erect
Calendula	12-36	D	10-14	12-14 Wks.	bushy
Campanula	18-24	F	8-15	10-12 Wks.	bushy
Candytuft	6-18	B F I	5-10	8-10 Wks.	bushy
Centaurea	18-36	A B C D E I J	5-20	3-4 Mos.	erect
Chrysanthemum	24-36	A E	5-20	8-10 Wks.	bushy
Celosia	12-36	D E H	20-25	10 Wks.	bushy
Cosmos	36-60	A	5-15	10-12 Wks.	bushy
Coreopsis	18-36	A B D	10-20	4-5 Mos.	bushy
Dahlia, Dwarf	14	F	10	3-4 Mos.	bushy
Delphinium	36-72	L	15-21	3-4 Mos.	tall
Digitalis	30-48	F	10-20	3-4 Mos.	erect
Dianthus	4-15	F I	5-10	12 Wks.	bushy
Eschscholtzia	10-12	C D F	5-12	12-15 Wks.	bushy
Four O'Clock	24-30	A D	5-10	3-4 Mos.	bushy
Gaillardia	18-30	D	15-20	2-3 Mos.	bushy
Godefia	12-24	C D	15-20	2 Mos.	erect
Gypsophila	18-36	B H	15-20	8-10 Wks.	branching
Helichrysum	24-36	H	5-10	3 Mos.	bushy
Hollyhock	48-84	L	5-20	10 Wks.	slender
Kochia	30-36	A B	15-18	Foliage	bushy
Larkspur, Annual	30-72	L	15-20	10-12 Wks.	tall
Lathyrus	60-72	I K	25-40	2-3 Mos.	vine
Lobelia	4-8	E J	10	10-12 Wks.	bushy
Marigold	8-36	B J	5-8	6-8 Wks.	bushy
Mignonette	10-12	B I		3-4 Mos.	erect
Moon Flower	12 ft. or more	I K	5-8	4-5 Mos.	vine
Morning Glory	12 ft. or more	A K	5-8	3-4 Mos.	vine
Nasturtium	12-36	D E F K	8-15	2-3 Mos.	bush.vine
Nigella	10-18	B F	10-15	10-12 Wks.	bushy
Nicotiana	30-48	I	20-25	10-12 Wks.	branchy
Pansy	4-8	C E F	10-15	10-12 Wks.	clump
Petunia	10-24	D E F J	18-20	10-12 Wks.	bushy
Phlox	10-18	A B C F I J	20-25	8-10 Wks.	bushy
Poppy	18-36	B	20	12-15 Wks.	erect
Portulaca	4-6	A D E F J	18-20	6 Wks.	spready
Salvia	12-42	A	15-25	3-4 Mos.	bushy
Scabiosa	18-30	I	18-20	2-3 Mos.	bushy
Stocks	12-24	I	5-15	12-14 Wks.	bushy
Schizanthus	18-36	C E	20-25	6-8 Wks.	bushy
Sweet Pea	36 or more	K	15-20	10-12 wks.	vine
Sweet William	12-24	F	10	12 Wks.	bushy
Verbena	6-12	E F J	8-10	12 Wks.	spready
Wallflower	12-18	I	5-12	2-3 Mos.	bushy
Zinnia	12-36	A F	5-10	6-8 Wks.	bushy

HOME GARDENING GUIDE



Avoid the hourglass effect in staking flowers

Fragrance in the Garden

During recent years the use of fragrant plants in the garden has been overlooked. Fragrant flowers are especially useful near seats, porches, terraces and other spots where they will add an aroma to the air. Of course, they are excellent to perfume bouquets.

One of the best known of the fragrant flowers is the **Nicotiana** or **Flowering Tobacco**. They are used to perfume gardens and are especially fragrant at night. **Mignonette** is grown exclusively for the sweet scent as the flowers are not showy. It is superb. **Stocks** and **Wallflowers** are exceedingly sweet scented, and **Sweet Peas**, of course, get their name from the odor. All of these are fine in the garden or in bouquets.

Many other flowers are sweet scented and when grown in beds or masses will perfume quite an area. **Nasturtiums**, **Petunias**, **Candytuft**, **Scabiosa**, and **Sweet Alyssum** are among these. **Carnations** are fragrant but their use as specimens does not cause the odor to be noticed except in flower arrangements. **Pinks** are strongly spice scented and a mass of them produces a pleasing aroma for some distance.

For the intimate spots in your garden, where you sit down to just enjoy it, plan to plant some of these fragrant flowers to increase your pleasure.

Flowers for Poor Soil

Of course, the right answer to poor soil conditions is "Improve the soil!" But if you can't or don't want to do this, you can usually get fairly good results in poor soil with these:

Balsam	Nasturtium
California Poppy	Petunia
Calliopsis	Portulaca
Gaillardia	Sweet Susan
Marigold	

Flowers in Vegetable Garden!

To have plenty of cut flowers without disturbing your flower borders, plant a few rows of flowers along the edge of your vegetable garden. Or set them out between rows of early lettuce or radishes, where they can bloom after the vegetables have been used.

Annuals in the Tulip Bed

Just after the late tulips finish blooming, set out some annuals between the tulip plants. If you do this, you may safely leave the tulip bulbs in the ground for several years, or at least until they need separating.

Flowers for Trellis or Fence

Vines for quick cover here are quite numerous. For brilliant color effects, plant **cardinal climber**, **scarlet runner bean**, **cypress vine**. Less colorful are the **cup-and-saucer**, **balloon vine**, and **Heavenly Blue morning glory**. For heavy foliage effects, gourds are good.

For Garage Cover

Sometimes it is highly desirable to screen off the bare walls of the back-yard and garage. For quick results, the taller annuals, such as cosmos, hollyhocks and sunflowers are desirable. Any of the vines named in the last paragraph above are suitable, too.

The Drive and Property Line

This narrow strip is often a very nice place for a long flower border. A low effect may be had by plantings of balcony petunia, portulaca, and sweet alyssum. Or a hedge-like effect is easy to get with kochia, four o'clocks, zinnias, or marigolds.

For Successive Sowings

Some of the annuals which come into bloom quickly keep blooming for only a little while. If you want them in bloom through the season, make several successive sowings at two to four week intervals. Flowers in this class include:

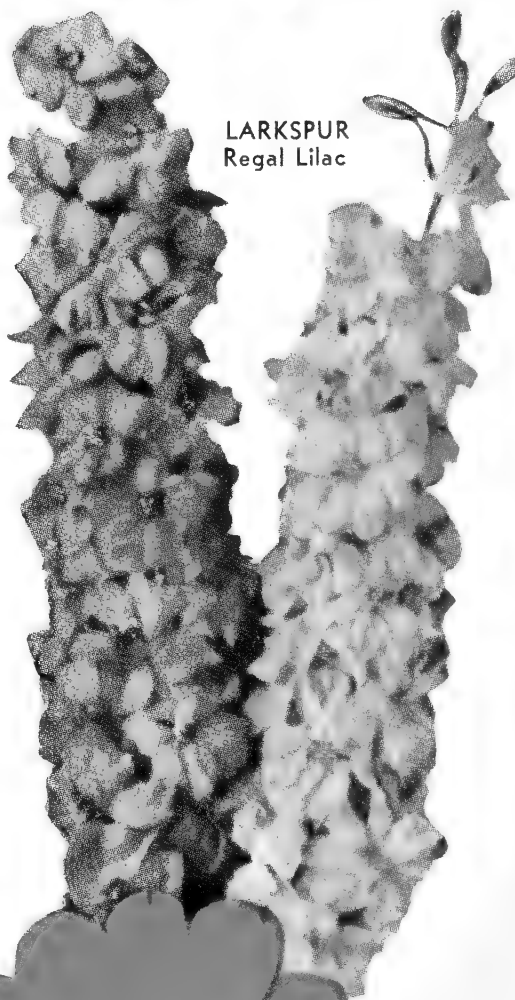
Calliopsis	Larkspur
Candytuft	Love-in-a-mist
Cornflower	Mignonette
Forget-me-not	Poppy
Gypsophila	

Easy Annuals to Grow

We are often asked to recommend annuals for growing without much care, particularly around summer cottages used only on week ends, or where the soil is poor. We suggest **Calliopsis**, **Gaillardia**, **Marigold**, **Petunia**, **annual Phlox**, **Scabiosa**, **Verbena** and **Zinnia**. These usually bloom profusely without care or extra watering, though some water applied when seed is sown will often insure germination.



MARIGOLD, Glitters



LARKSPUR
Regal Lilac



TITHONIA,
Torch

WHY FOLKS LIKE TO BUY GARDEN SUPPLIES HERE

We don't have any monopoly on the Garden Supplies we sell. Quite a few of them can be bought in many other stores.

But good gardeners still prefer to buy here, because this is a real garden store. Here every transaction is a friendly deal between gardeners. Here we try our best to deliver something more than just merchandise.

That's because we're SEEDSMEN—and proud of it!

COSMOS

(a) Culture II or IV, 3-4'

FIESTA—Bi-color! Orange colored with scarlet longitudinal stripes. New. Pkt. 25c.

DAZZLER—Wavy fluted petals of a velvety crimson-maroon. Pkt. 15c.

ORANGE RUFFLES — Semi-double flowers. Golden orange. Airy effect. Pkt. 25c.

YELLOW FLARE — Butter-yellow flowers. Similar to Orange Flare. Pkt. 15c.

RADIANCE—A bi-color! Beautiful, deep rose flowers have a rich crimson zone in center. Striking! Pkt. 15c.

SENSATION MIXED—Huge single flowers, wavy petals, many colors. Pkt. 15c.

YELLOW RUFFLES — New. Semi-double. Bright yellow. Airy effect. Pkt. 25c.

CYNOGLOSSUM—Chinese

Forget-Me-Not

(a) Culture II, 15"

FIRMAMENT—Hundreds of tiny indigo blue flowers. Resemble Forget-me-nots. Bloom all summer.

DAHLIA

(a) Culture I or II, 14"

UNWIN'S IDEAL BEDDING—Semi-double flowers on low bushes. Fine for beds or borders. Many colors. Pkt. 20c.

DAISY, AFRICAN—SEE ARCTOTIS

DAISY, ENGLISH—Bellis Perennis

(hp) Culture VI, 8"

Low plants with colorful double daisies in early spring. Ideal for beds. Pkt. 20c.

DAISY, SWAN RIVER—

Brachycome

(a) Culture II, 10"

MIXED—Many colored small daisy-like flowers freely produced all summer. Good garden stand-by. Pkt. 15c.

DELPHINIUM—Perennial

Larkspur

(hp) Culture VI, 5'

GIANT PACIFIC HYBRIDS—World famous strain of immense double flowers on tall stems. Many new colors. Pkt. 35c.

DIANTHUS—Pinks

(a) Culture I or VIII, 1'

DOUBLE AND SINGLE MIXED—Fine mixture of colorful, scented, garden pinks.

GAIETY—Fringed petals in a wide range of flower colors and shapes. Single with lacy appearance. Pkt. 15c.

HEDDENSIS—New tetraploid hybrids! Larger flowers, longer stems, better growth. Many fine colors. Pkt. 15c.

DIANTHUS BARBATUS—SEE SWEET WILLIAM

DIDISCUS—Blue Lace Flower

(a) Culture I or II, 2½'

COERULEUS—Lacy heads of lavender and blue flowers. Lovely to cut. 15c.

DIGITALIS—SEE FOXGLOVE

ESCHSCHOLTZIA—California Poppy

(a) Culture III, 1'

Large single poppy-like flowers in many showy colors. Fern-like leaves.

EUPHORBIA—SEE SNOW-ON-THE MOUNTAIN

EVERLASTING FLOWERS

(a) Culture II, 1½-3'

MIXED—Contains such favorites as Straw-flower and Globe Amaranth. Fine for dried bouquets.

FLOWERING FLAX—SEE LINUM

FOUR O'CLOCK—Mirabilis

(a) Culture III, 2'

Bushy plants covered with flowers of red, pink, white, violet, and yellow. Flowers close in bright sun. Pkt. 15c.

FOXGLOVE—Digitalis

(b) Culture VII, 3'

Tall spikes of lovely thimble-shaped flowers of pink, rose, and purple. Beautiful blooms second year. 15c.

34—ALL

GAILLARDIA—Blanket Flower

(a) Culture II, (hp) VI, 2'

DOUBLE, MIXED (a)—Double flowers in wide range of colors. Pkt. 15c.

PICTA (a)—Showy round flowers with tubular petals. Many colors. Pkt. 15c.

MONARCH (hp)—Superb daisy type flowers in shades of red and yellow.

GEUM

(hp) Culture VI, 1½'

MRS. BRADSHAW—Glowing Scarlet flowers. Bright green foliage. Pkt. 20c.

GILLIFLOWER—SEE STOCKS

GLOBE AMARANTH—SEE EVERLASTING FLOWERS

GOMPHRENA EVERLASTING—SEE EVERLASTING FLOWERS

GODETIA—Satin Flower

(a) Culture I or II, 2'

DOUBLE, MIXED—Azalea-like flowers of many colors on bushy plants.

GOURDS, ORNAMENTAL

(a) Culture III, 12'

MIXED—Large and small kinds that will be useful for dried novelties. 15c.

GYPSOPHILA—Babys' Breath

(a) Culture I, (hp) VI, 1½-3'

ANNUAL WHITE (a)—Open, bell-shaped blooms on branching stems give airy touch to garden or bouquet.

ANNUAL PINK (a)—The small flowers are a rosy pink. Like above.

PERENNIAL WHITE (hp)—Large loose clusters of small flowers give misty effect. Excellent for cutting.

HELIANTHUS—Sunflower

(a) Culture II, 6'

SUN GOLD—Large double flowers of a brilliant golden yellow. Pkt. 15c.

HELICHRYSUM—SEE EVERLASTING FLOWERS

HIBISCUS—Rose Mallow

(hp) Culture VI, 4'

GIANT MIXED—Huge bell-shaped flowers in white, pink, red. Tall plants for damp spots. Pkt. 15c.

HOLLYHOCK

(hp) Culture VI or VIII, 5'

DOUBLE MIXED—Large double flowers on tall spikes. Bloom in midsummer.

HUNNEMANNIA—Mexican

Tulip Poppy

(a) Culture III, 1½'

SUNLITE—Soft yellow double poppy type flower. Bluish fine cut leaves. Different and effective. Pkt. 15c.

IBERIS—SEE CANDYTUFT

IPOMEA—SEE MORNING GLORY

KOCHIA—Burning Bush or Summer Cypress

(a) Culture III, 2½'

Compact pyramid. Needs no trimming. Bright green foliage makes neat, quick hedge. Turns bright red in fall.

LADY SLIPPER—SEE BALSAM

LATHYRUS LATIFOLIUS—SEE PERENNIAL SWEET PEA

LARKSPUR—Annual Delphinium

(a) Culture II or IV, 3'

REGAL DARK BLUE—Tall spikes of large double flowers in a violet blue. Pkt. 15c.

REGAL WHITE — Pure glistening white spikes. Tall and stately. Pkt. 15c.

REGAL PINK—Lively light salmon pink. Glorious when cut. Pkt. 15c.

REGAL LILAC—Clear lilac with green buds. Tall with fat spike of large florets. Pkt. 15c.

REGAL ROSE—Rose color. Long, thick spikes with exceptionally large florets. Vigorous and early. Pkt. 15c.

RUBY—A genuine ruby red. A bright color in garden or bouquet. Pkt. 15c.

GIANT REGAL MIXED—A fine mixture of the above and others. Pkt. 15c.

LAVATERA—Annual Mallow

(a) Culture II, 2-3'

LOVELINESS—Large bowl shaped, rosy pink flowers all summer. Attractive bronzy foliage. Pkt. 15c.

LINARIA—

Baby Snapdragon

(hp) Culture I, II, IV or VI

NORTHERN LIGHTS—About 15" high. Brilliant colors. Excellent quick-growing, cutting flower. Pkt. 25c.

LINUM—Flowering Flax

(a) Culture III, (hp), VI, 1-2'

SCARLET (a)—Bright red flowers in a constant succession all summer.

PERENNIAL BLUE (hp)—Low bushy plant blooming from spring to midsummer. Small, clear blue flowers in profusion.

LOBELIA

(a) Culture I or V, 4"

CRYSTAL PALACE—Compact border plant with myriads of tiny bright blue flowers. For all low use. Pkt. 25c.

LOVE-IN-A-PUFF—SEE BALLOON VINE

LUPINE

(hp) Culture III or VII, 3'

RUSSELL'S MIXED—Finest of all the lupines! Brilliant colors in long, strong spikes of pea-shaped flowers. Pkt. 25c.

MALLOW, ANNUAL—SEE LAVATERA

MALLOW, ROSE—SEE HIBISCUS

MARIGOLDS

(a) Culture I or II,

Tall Types 1½-2'

REAL GOLD—Large carnation-like flowers in striking bright orange. Pkt. 15c.

GLITTERS—All-American 1951—Clear yellow. Double. Bushy with long stem. Pkt. 25c.

YELLOW SUPREME—Light yellow, large flowers of carnation form. Pkt. 15c.

SUNSET GIANTS — Huge dahlia-flowered strain. Lemon and gold. Pkt. 15c.

Double Dwarf Types, ½-1'

MELODY—Foot high plants with loads of orange ball-like flowers. Pkt. 15c.

ROYAL SCOT—Alternating stripes of red and gold. Very different. Pkt. 15c.

SPRY—Compact plants with showy yellow flowers bordered with mahogany. Distinctive and showy. Pkt. 15c.

SUNKIST—Compact plants with masses of golden orange blossoms. Pkt. 15c.

SCARLET GLOW—Compact, with bright red, 2" blooms. Reddest of all. Strikingly different. Pkt. 15c.

Single Dwarf Types, 1-1½'

FLASH—Plants have many 1¾" flowers in tangerine and red shapes. Pkt. 25c.

NAUGHTY MARIETTA—Open 2½" flowers are rich gold with maroon at base of petals. Fine for edging. Pkt. 25c.

RED HEAD—1948 All-America Award. Crested center of gold edged maroon, petals deep changeable red. Pkt. 25c.

MIGNONETTE—Reseda

(a) Culture III, 1'

Low grower with tiny, white blooms that are very sweet scented.

MIRABILIS—SEE FOUR O'CLOCKS

MORNING GLORY—Ipomea

(a) Culture III, V or VII, 12'

IPOMEA DARLING—Sky blue with five deep blue mid-ribs forming a star. Pkt. 25c.

HEAVENLY BLUE—Sky-blue flowers. Flowers close in bright sun. Exquisite on fences. Pkt. 15c.

PEARLY GATES—A shining white form of Heavenly Blue. Pkt. 25c.

SCARLETT O'HARA—Large velvety scarlet flowers. Very showy. Pkt. 20c.

MIXED—Many lovely shades.

MOSS ROSE—SEE PORTULACA

MOURNING BRIDE—SEE SCABIOSA

NASTURTIIUM

(a) Culture III or V

Dwarf or Bush Kinds 1'

GOLDEN GLOBE—Semi-double flowers of bright gold. Pkt. 15c.

SCARLET GLOBE—Fiery scarlet double. Old-fashioned beauties. Pkt. 15c.

MAHOGANY GEM—Deep velvet mahogany red double flowers. Pkt. 15c.

GEM MIXED—All colors. Pkt. 15c.

SINGLE MIXED—Complete mixture of all colors of well-known single type.

Tall or Vine Kinds 3-10'

GOLDEN GLEAM—Large golden flowers. Double and fragrant. Pkt. 15c.

SCARLET GLEAM—Fiery orange scarlet flowers. Double and fragrant. Pkt. 15c.

SALMON GLEAM—Delicate golden salmon double flowers. Pkt. 15c.

GLORIOUS GLEAM—A mixture of all the colors of the Gleam series. Pkt. 15c.

TALL SINGLE MIXED—The old single type in the tall growers. All colors.

NEMOPHILA—Baby Blue Eyes

(a) Culture II, 6"

Many cup-shaped sky-blue flowers on low spreading plant. Pkt. 15c.

NICOTIANA—Flowering

Tobacco

(a) Culture I or II, 2-3'

SENSATION—Long-tube starry flowers. Fragrant at night. White or light pink mixed. Pkt. 15c.

PAINTED TONGUE—SEE SALPIGLOSSIS

PANSY

(a) Culture I, II or VIII, 8"

SWISS GIANTS—Large flowering strain with fine range of gorgeous colors. Best of the improved pansies. Pkt. 35c.

TUFTED PANSY—SEE VIOLA

PERIWINKLE—SEE VINCA

PETUNIA

(a) Culture I or IV

Small Flowered, 10-14"

BALLERINA—All-American, 1952 winner of Honorable Mention — Bright. Deep rose fringed grandiflora type. Delicately fringed. Pkt. 50c.

BALCONY—Trailing kinds for use in window boxes and bedding. White, red, rose, or blue. Each. Pkt. 15c.

BLUE BEE—Violet blue.

CHEERFUL—Clear salmon pink with rose veining in throat. Pkt. 25c.

ENGLISH VIOLET—A fine purple-violet color. Spreading plant. Pkt. 20c.

FIRE CHIEF—Brilliant Red. All-American Gold Medal Winner for 1950. The only flower to win this award in twelve years. Compact, and dwarf flowers profusely. Pkt. 25c.

FLAMING VELVET—A velvety blood red. Best of its color. Pkt. 20c.

GLOW—Rich carmine red flowers on a compact plant. Brilliant. Pkt. 25c.

MARTHA WASHINGTON—Ruffled flowers of pale pink, violet throat. Pkt. 25c.

ROSE OF HEAVEN—Best of the rose colored strains made famous by Rosy Morn. Color is slightly deeper and more uniform.

SILVER MEDAL—1949 All American Award. A lovely salmon. Good size flowers on compact plants. Pkt. 50c.

Large Flowered, 12-20"

AMERICA—Double carnation-like flowers of a deep rose pink. Pkt. 50c.

BURGUNDY—Huge single flowers of a rich wine red, white throat. Pkt. 20c.

COLOSSAL SHADES OF ROSE—1948 All-American. Large plants have huge flowers of light and deep pink shades. Very double with many frilled and delicately fringed petals. Pkt. \$1.00.

GIANTS OF CALIFORNIA—Huge flowers of many fine pastel tints. Pkt. 25c.

LITTLE GIANTS MIXED—Compact plants with medium flowers in many new colors and shapes. Pkt. 25c.

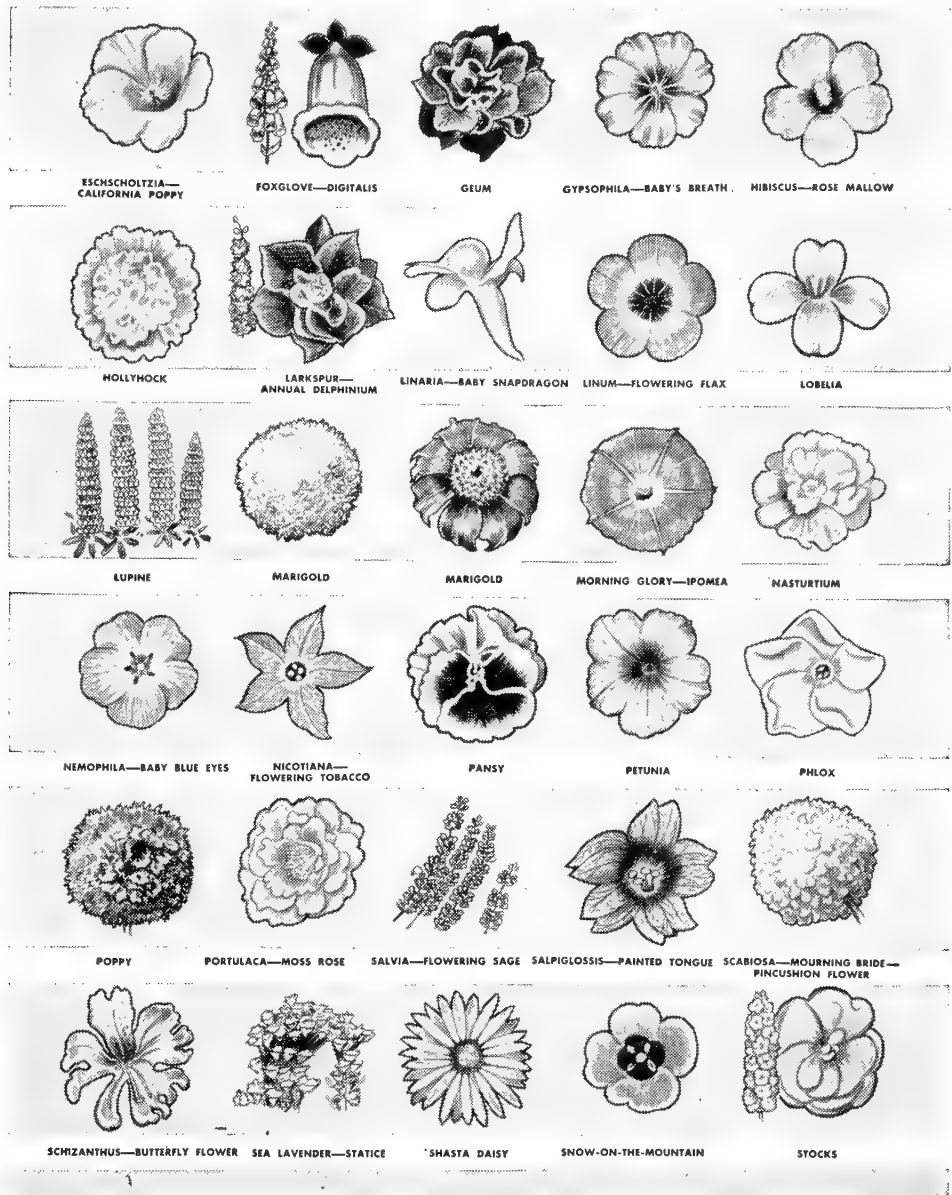
SNOW STORM—Large plain glistening white flowers with creamy shading in throat. Very beautiful. Pkt. 25c.

THEODOSIA—Large ruffled flowers of deep rose pink with golden throat. Very showy and lovely. Pkt. 25c.

how? when? HOME GARDENING GUIDE where? why?

A DIGEST OF FLOWER SHAPES, SIZES and COLORS—The thirty thumbnail illustrations shown below are an alphabetically arranged brief guide for the uninitiated flower grower. These portray the shape of individual blossoms only. Many of them

grow in large clusters and spikes. The many beautiful marigold and zinnia shapes are too numerous to be fully illustrated here. However, some of these varieties are shown in the color portions of this flower section.



Descriptions and names of the flowers shown are listed below with the following information: Usual flower height, flower diameter and color; also if it grows in floret spikes or clusters.

For example: **FOXGLOVE-DIGITALIS**, the second flower on the first row—Floret spike, 3' (usual height), 2", (flower diameter), yellow, purple (the colors it attains).

1st Row: **ESCHSCHOLTZIA-CALIFORNIA POPPY**, 1', 2", crimson, orange; **FOXGLOVE-DIGITALIS**, Floret spike, 3', 2", yellow, purple; **GEUM**, 1½', 1½", orange, scarlet, yellow; **GYPHOPHILA-BABY'S BREATH**, Floret cluster, 1½-3', white; **HIBISCUS-ROSE MALLOW**, 4', red, white, lavender, rose.

2nd Row: **HOLLYHOCK**, 5', white, red, yellow, pink, maroon; **LARKSPUR-ANNUAL DELPHINIUM**, Floret spike, 3', blue, white; **LINARIA-BABY SNAPDRAGON**, Floret spike 15", rose, crimson, yellow, orange, white; **LINUM-FLOWERING FLAX**, Floret cluster, 1-2', 1½", blue, yellow, white, red; **LOBELIA**, 4", blue.

3rd Row: **LUPINE**, Floret spike, 3', blue, yellow, rose, white; **MARIGOLD (Chrysanthemum)**, 18"-3', 2-4", yellow, orange, numerous varieties; **MARIGOLD (Red Head)**, 18", Bi-color yellow and red; **MORNING GLORY-IPOMEA**, 12', 3-4", blue, pink, purple; **NASTURTIIUM**, 12", 2½", yellow, rose, orange.

4th Row: **NEMOPHILA-BABY BLUE EYES**, Floret cluster, 6", ½-1', blue, white, violet; **NICOTIANA-FLOWERING TOBACCO**, Floret cluster, 2-3', white, yellow, purple; **PANSY**, 8", 2", purple, white, yellow, Bi-color; **PETUNIA**, 10-14", 3", white, red, blue, purple, violet, rose, pink, numerous varieties; **PHLOX**, Floret cluster, 8-12", red, pink, violet, blue, white.

5th Row: **POPPY**, 3', white, rose, pink; **PORTULACA-MOSS ROSE**, 6", 1", yellow, purple, pink; **SALVIA-FLOWERING SAGE**, 2-3', blue; **SALPIGLOSSIS-PAINTED TONGUE**, 30", 2½", purple, blue, red, brown, yellow; **SCABIOSA-MOURNING BRIDE-PINCUSHION FLOWER**, 2', blue, pink.

6th Row: **SCHIZANTHUS-BUTTERFLY FLOWER**, 1½", white, lilac, blue, pink; **SEA LAVENDER-STATICE**, 2', ¾", white, rose; **SHASTA DAISY**, 2', 2-4", white; **SNOW-ON-THE-MOUNTAIN**, Floret cluster, 2', white; **STOCKS**, Floret spike, 1-2', white, lavender.



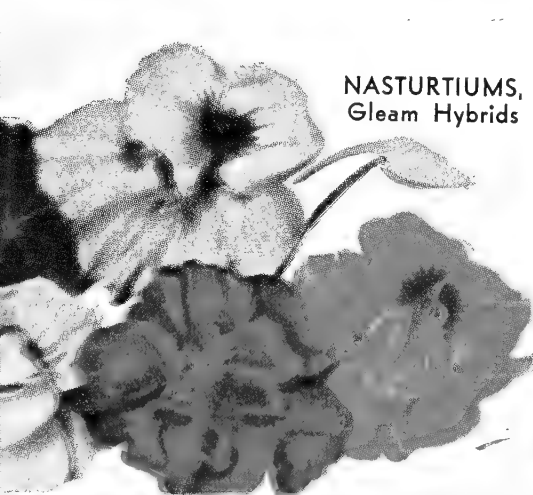
MARIGOLD, Red Head



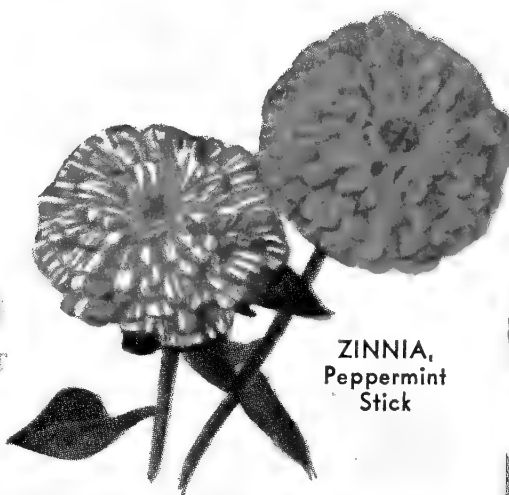
ASTER, Ballet



CARNATION, Chabaud's Enfants



NASTURTIUMS,
Gleam Hybrids



ZINNIA,
Peppermint
Stick



PANSY,
Swiss Giant

PHLOX

(a) Culture II, 8-12"

Lovely clusters of showy flowers on low plants from early spring on. Easily grown. Many splendid colors.

Art shades—Rosy Morn, Salmon Glory, 20c. Mixed, Pkt. 15c.

PINKS—SEE DIANTHUS

PINCUSHION FLOWER—SEE SCABIOSA

POPPY

(a) Culture IV (hp) VI, 1 1/2-3'

GARTFORD—Pastel mixture. Long stemmed. Very rich. A most unusual giant flowering strain of poppy, Pkt. 35c.

ICELAND MIXED—Excellent perennial for borders, rock gardens. Large colorful, ferny foliage, Pkt. 20c.

ORIENTAL SCARLET—Huge red blooms in early summer from perennial root. Useful for bold color, Pkt. 20c.

SHIRLEY, MIXED—The easily grown, lovely annual poppy. Many bright colors. Grows easily and self-sows.

POPPY, CALIFORNIA—SEE ESCHSCHOLTZIA

POPPY, MEXICAN TULIP—SEE HUNNEMANNIA

PORTULACA—Moss Rose

(a) Culture, III or IV, 6"

JEWEL—Huge crimson flowers. Much larger than old kinds, Pkt. 15c.

SINGLE, MIXED—Many brilliant colors.

DOUBLE, MIXED—All double, Pkt. 20c.

POT MARIGOLD—SEE CALENDULA

RICINUS—SEE CASTOR BEAN

SALVIA—Flowering Sage

(a) Culture I, 2-3'

AMERICA OR GLOBE OF FIRE—The well-known Scarlet Sage that is a blaze of vivid scarlet in summer. Pkt. 25c.

BLUE BEDDER—Deep medium blue. Slender plant for airy effect. Use to lighten up thick plantings, Pkt. 15c.

SALPIGLOSSIS—Painted Tongue

(a) Culture III, 30"

MIXED—Large petunia-like flowers of rich velvety colors, veined with gold.

SCABIOSA—Mourning Bride, Pincushion Flower

(a) Culture III or IV, 2'

CORAL MOON—New coral shade. Large double flowers on firm cutting stems, Pkt. 25c.

BLUE MOON—Large double flowers of deep lavender blue, Pkt. 15c.

PEACE—Round double flowers of pure white. Fine for cutting, Pkt. 15c.

IMPERIAL GIANTS, MIXED—Large globe-shaped flowers in a wide range of red, white, coral rose and blue, Pkt. 15c.

MIXED—All colors of the old type.

SATIN FLOWER—SEE GODETIA

SCARLET FLAX—SEE LINUM

SCARLET SAGE—SEE SALVIA

SCHIZANTHUS—Butterfly-Flower

(a) Culture II or IV, 1 1/2'

MIXED—Small flowers shaped like multi-colored butterflies. Delicate cut leaves. Free flowering, Pkt. 15c.

SEA LAVENDER—Statice

(a) Culture I, 2'

MIXED—Small tubular flowers in colorful branching spikes, Pkt. 15c.

SPIDER PLANT—SEE CLEOME

STRAW FLOWER—SEE EVERLASTING FLOWERS

SHASTA DAISY

(hp) Culture VI, 2'

ALASKA—Largest of the Shasta strains, Big, white flowers with yellow centers.

SNAP DRAGON—SEE ANTIRRHINUM

SNOW-ON-THE-MOUNTAIN—

Euphorbia

(a) Culture III, 2'

Bright green foliage edged with white. Good for edging or contrast, Pkt. 15c.

STOCKS—Gilliflower

(a) Culture I or IV, 1-2'

GIANT IMPERIAL—Excellent double flowers on tall stems. Many bright colors, Pkt. 25c.

BEAUTY OF NICE—Branching with double fragrant flowers.

DWARF TEN WEEKS—Low growing with strong spikes. Many fine colors.

SWEET PEAS

(a) Culture III, 3'

EARLY SPENCER—Earliest of the many strains. Large colorful, fragrant blossoms. By variety or mixed, Pkt. 15c.

(Continued on next page)

ALL FLOWER SEEDS

10¢ PER PACKET

UNLESS OTHERWISE NOTED

ALL PRICES
IN THIS CATALOG
ARE SUBJECT TO CHANGE
WITHOUT NOTICE

SWEETPEAS—Continued

LATE SPENCER—Large fine flowers that flower in early summer. By colors or mixed. Pkt. 15c.

CUTHBERTSON—Hardy and heat resistant. Long-stemmed and rich colors. Coline (Scarlet) 15c—Janet (White) 15c—Lois (Rose Pink) 15c—Danny (Navy Blue)—15c—Frank G. Soft, (rosy lavender) 15c—Mixed—15c Pkt.

RUFFLED SPENCER—Wavy and ruffled petals. Many fine colors or mixed. Pkt. 15c.

PERENNIAL SWEET PEA—Large vine and large flowers. Useful on trellis or fence. Not fragrant. Blooms all season. New stems yearly. Pkt. 15c.

SUNFLOWER—SEE HELIANTHUS

SWEET SULTAN

(a) Culture II or IV, 2½'

MIXED—Lovely colorful thistle shaped flowers. Very easily grown.

SWEET WILLIAM—Dianthus Barbatous

(hp) Culture VI, 1½-2'

DOUBLE—Double flowers crown the heavy heads of many colors. Pkt. 15c.

SINGLE—Lovely, single pinks in large flat clusters. Fine for cutting.

THRIFT—SEE ARMERIA

TICKSEED—SEE CALLIOPSIS

TITHONIA—Golden Flower of the Incas

(a) Culture I, 4'

TORCH—All American Silver Medal 1951—Fiery scarlet. Compact, upright, bushy. Pkt. 25c.

TRITOMA—Red Hot Poker

(p) Culture VI, 3-4'

PFITZER'S HYBRIDS—Narrow tubular flower on tall spikes, orange red. Graceful grassy foliage. Not perennial under some circumstances. Pkt. 15c.

A

VERBENA

(a) Culture I, 8"

LAVENDER GLORY—Lavender with white eye. Large. Fragrant. Pkt. 15c.

MAMMOTH WHITE—Large heads of pure white. Fragrant. Pkt. 15c.

SCARLET—Flaming scarlet heads. Brilliant in beds. Pkt. 15c.

BLUE SHADES—Medium and dark blues in mammoth type. Pkt. 15c.

MIXED—Huge flower clusters, all colors. For beds and borders. Pkt. 15c.

VINCA—Periwinkle

(a) Culture III, 15"

MIXED—Colorful starry flowers on glossy-leaved, bushy plants. Does well in shady spots. Pkt. 15c.

VIOLA—Tufted Pansies

(hp) Culture VI, 6"

MIXED—Miniature pansies from neat plants. Flower all season. Many showy colors mixed. Pkt. 15c.

WALLFLOWER

(a) Culture I or V, 1½'

MIXED—Blood-red and yellow flowers. Resemble single stocks. Early and delightfully fragrant.

WILD FLOWER MIXTURE

(a) Culture II or III, ½-3'

Old fashioned flowers in a fine mixture for all season flowering. Sow thinly and enjoy continuous flowers and delightful surprises. These are not wild flowers of the fields but a selection of garden flowers that gives a "wild" garden look when planted in a border. A good way to get acquainted with some of the unusual kinds of garden flowers.

ZINNIA

(a) Culture I or II

Small Types, 12-18"

RED RIDING HOOD—Deep scarlet flowers 1" across. Free flowering. Fine border plant of Lilliput type.

PERSIAN CARPET—All American Honorable Mention 1952. Bi-colored. Rich deep tones of red and gold along with sunset shades. Medium-sized blooms on good cutting stems. Pkt. 25c.

LILLIPUT PASTELS—Lovely soft colors in the miniature strain. Fine for borders or small bouquets.

LINEARIS—Single daisy-like type with small flowers in orange.

NAVAJO MIXED—Resemble Gaillardias in shape. Many colors in showy mixture. Medium size plants. Pkt. 15c.

PUMILA SUNSHINE TINTS—Dwarf plants with medium flowers in a wide range of delicate, soft colors.

SCABIOUS FLOWERED—Medium size flowers on a semi-tall plant. Resembles Scabiosa in shape. Bright colors mixed. Pkt. 15c.

TOM THUMB MIXED—Lilliput type flowers on a very dwarf plant. For low borders and miniature displays. Pkt. 15c.

FANTASY—Medium tall plants with medium size flowers, shaggy petals.

MELODY (orchid lavender), **Star Dust** (golden), **White Light** (white), **Wildfire** (scarlet), and **Mixed**, Pkt. 15c.

Large Types, 2-2½'

SUPER CROWN OF GOLD PASTELS—New, improved, with many pastel colors overlying the golden base. Pkt. 15c.

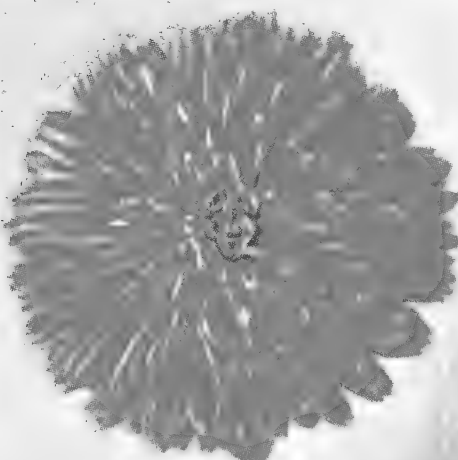
DAHLIA FLOWERED MIXED—Huge flowers in a bewildering range of bright and pastel colors.

GIANTS OF CALIFORNIA, MIXED—Mammoth flowers in many striking colors. Largest zinnias of all.

PEPPERMINT STICK—Bi-colored! Basic red flowers with white or yellow stripes. Pkt. 25c.

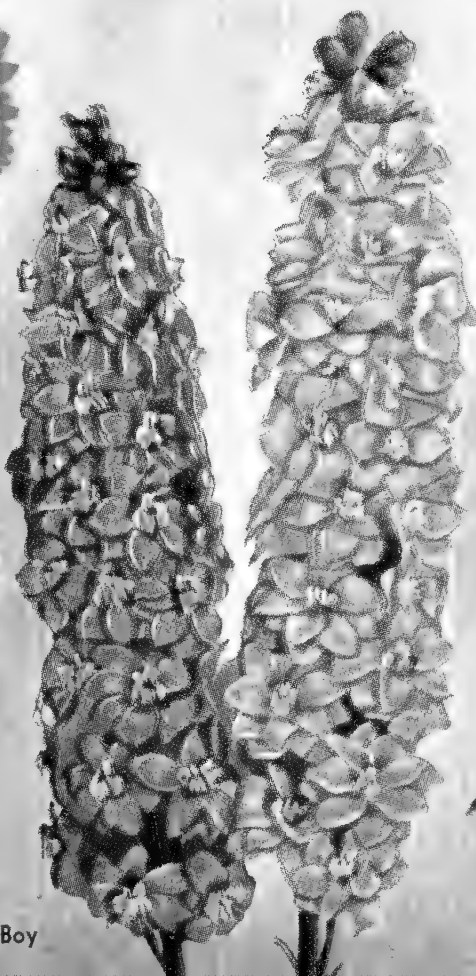
WILL ROGERS—Dahlia type with deep scarlet color. Striking. Pkt. 15c.

37



CALENDULA, Pacific Beauty

DELPHINIUM, Pacific Hybrids



GAILLARDIA, Double Mixed



BACHELORS BUTTONS, Blue Boy



DIANTHUS (PINKS) Heddensis

FLOWER CULTURE

..... HOW TO GROW all the flowers listed in our Garden Annual

The numbers, I to VIII, found with every flower listing refer to the following cultural notes which give directions for growing all of the flowers we list.

In general these elements are necessary for best results with all flowers: Loose, well-drained soil, a plentiful supply of organic matter, a good supply of plant food from a good mixed fertilizer, adequate water to keep soil moist and care to remove weeds and check pests.

One of the important problems in the garden is that of maintaining a continuous show of bloom. This calls for the use of several different types of annuals, such as those that must be planted early to grow in cool weather (**Culture IV**) and those which bloom later in summer heat (**Culture I and II**). If some of the cool-weather annuals from **Group IV** are sown in mid-summer and kept well watered, they will grow slowly until the cooler days of fall start them into more active growth. These will produce late flowers. Quick-growing annuals from **Group II** may also be sown at intervals for a succession of bloom during the summer.

One way to lengthen the blooming period of annuals is to cut off all flowers as soon as they fade. Annuals complete their life span when seed is formed and frequently stop flowering as soon as the seed ripens. By preventing the seed from forming through removal of all old flowers, the plants are kept growing and blooming.

Culture I

These flowers need a long season and must be started indoors if a full blooming period is to be had. If early bloom is not important, they will bloom later in the summer when sown directly in the garden. Some gardeners sow both ways to obtain a succession of flowers.

When starting seedlings indoors, select a place with plenty of light. North or shaded windows may be too dark for best results. Cold frames are generally very good. The seed is planted in small boxes (or flats) that have a good drainage and will fit the space you are going to use. Fill them with a mixture of $\frac{1}{3}$ good soil, $\frac{1}{3}$ sand and $\frac{1}{3}$ humus such as peat. Press the soil down firmly and make small rows with the edge of a ruler or lath and slowly shake the seed from the packet into the rows. Sift a light covering of the soil mixture over the seed and moisten with a fine spray. Keep soil moist until the seeds have sprouted. Very fine seed such as that of petunias should be dusted carefully onto a smooth soil surface and covered with a pane of glass. Shade it with newspaper until the seeds sprout. These are best watered by setting the flat in a pan of water until the soil has become thoroughly dampened all the way through. When the seedlings have formed the second true leaves, transplant them into other flats so the plants are about $2\frac{1}{2}$ inches apart. This will give them room to grow to good size before being set out. Expose gradually to outside conditions and plant outside after the weather is warm and settled. When sown directly outdoors, follow directions under **Culture II**.

Culture II

These are the quicker-growing annuals that can be sown directly in the garden and will bloom in time to make a good display

for most of the summer. If wanted especially early, they should be started as directed under **Culture I**.

Some flower seedlings are rather delicate. Extra care in preparing the seed bed will pay dividends in better plants. Prepare soil with a liberal amount of mixed fertilizer and organic matter and dig it in. Rake the surface until it is smooth and pulverized. Sow the seed at a depth equal to three times the diameter of the seed. Fine seed can be spread on the surface and pressed in without covering.

Keep soil moist by light spraying until the seedlings have formed the first true leaves. When they are large enough to handle, they may be transplanted to other parts of the garden.

Culture III

These flowers do not transplant well. They should be planted where they are to bloom.

Sow as soon as the weather begins to warm in the spring. **Otherwise the culture is the same as II.** Sow seed thinly or remove the smaller plants after they are up. These can be handled as pot-grown plants as in **Culture VII**.

Culture IV

These flowers are unusually hardy annuals that can withstand very cool weather. They are often sown late in fall so they can start growing the first warm days of spring. If not sown in the fall, they should be planted as early in the spring as possible. Fall sowing gets the seeding job out of the way before the spring rush.

Culture V

These flowers, while garden subjects, are also useful for winter-flowering house plants. **For garden use, handle as in Culture II.** For winter flowering indoors, plant fairly late in the season and transplant into small pots as soon as they are large enough. Keep moving them to larger pots as roots fill the soil until they are finally in six-inch pots. Annuals in pots should have at least six hours of direct sunlight daily if they are to flower.

Culture VI

Perennials can be seeded at almost any time of the year. Best periods are early in the spring or in early summer when the rush of spring work is over. A cold frame or sheltered bed which can be shaded from the direct sun is best. Prepare soil thoroughly with plenty of organic matter. A loose, friable soil will produce a thick mat of roots so that the seedlings will transplant more easily. Perennial seedlings are rather weak growers needing extra care. In covering the drills in which the seeds are sown, use either pure, clean sand or a mixture of half sand and half peat moss. This prevents packing of the soil over the seeds. Always water with a fine spray.

As soon as the second leaves form, seedlings may be transplanted into their permanent position. Or, if more convenient, they may be left in the seed bed until the following spring. Under this culture, only a few species will bloom the first year and they will not produce normal flowers until the following year. Planting earlier does increase the chances for flowers the first year. But, if it is more convenient, **Culture I** may



be used. Delphinium seed is often started in August to take advantage of the cooler nights for the seed will not grow when the soil temperature is above 77 degrees.

Culture VII

These varieties need a longer growing season that can be given them outdoors. And because they do not transplant well, they must be started in pots and set out without disturbing the roots. **Otherwise Culture is the same as I.** The use of plant bands allows you to set the seedlings out without disturbing the roots. The bands soon rot away and the seedlings will grow as though started in the garden.

If clay pots are used, the excessive drying can be avoided by placing the pots in a flat and filling the space between them with damp peat moss or vermiculite. Be sure to keep this material moist or it will draw moisture from the pots.

Culture VIII

These flowers are biennials. They make a leafy growth the first year but do not flower. The leafy growth of the first year forms food for blooming the following year. The flowers appear the second year and then the plant dies.

This means that a continuing show from biennials must be provided by starting new plants every year to replace those that are flowering.

Biennials are handled in the same way as perennials except that they are started early in the spring to allow the plant to store as much food as possible for the next year's bloom.

Many gardeners start biennials in the vegetable garden or special starting bed and then transplant the ones needed to the flower garden the following spring. During winter, biennials should be given the same treatment as perennials.

Pansies are tender perennials that are treated as annuals or biennials. When grown as annuals, they should be started indoors about six weeks before time for planting out in early spring. When grown as biennials, the seed is started in late summer and the plants carried over winter in protected spots where extremes of temperature and moisture are avoided. Mulching or the use of frames may be necessary in your particular garden. Pansies do best under conditions of constant, moderate moisture, partial shade and a humus-rich soil. Pinching off old flowers will prolong the flowering season.

WEED KILLERS

Nowadays, it takes only two types of weed killers to do the whole job of weed eradication around most homes. 2, 4-D, the miraculous new selective killer (Weedone, End-o-Weed, Weed-no-more) will do nearly all the work without a bit of digging. You just spray it on! The only other control you need is a good crab grass killed. For more extensive weed problems other materials may, of course, be needed. We have these, too — and can advise you about their uses.

WEED-NO-MORE

MAGIC WEED KILLER

2, 4-D. Rids lawns of ugly weeds such as dandelion, plantain, chickweed, ragweed, poison ivy, poison oak and many others without injury to common lawn grasses. Just mix with water and spray. 8 oz. bottle covers average lawn. The handy applicator to fit a gallon or half-gallon jug simplifies the job. Quart, \$2.98; Applicator 49c or free with every purchase of quart size.



GROWTH AIDS

Plant hormones, the modern garden wonder, can do many amazing things. They stimulate seed germination, make cuttings root faster, give you better seedlings, help transplanting by reducing shock and wilt. They stop fruit and blossom drop, produce better tomatoes, beans, etc., and help in many other ways. But, for the best results, be sure you have the right hormone for each purpose! We have them all and can advise you about their correct use.

MORE TOMATOES! FRUITONE®

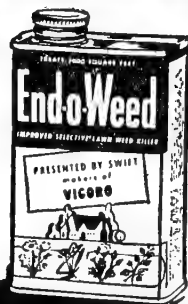
Spray Fruitone at blossoming time and each plant will set more fruit and bear more big, meaty tomatoes. Spray Fruitone for bigger crops of beans and lima beans, too. The dollar package makes 25 gallons of spray.

2/5 oz. packet, 25c • 2-oz. pkg., \$1
12-oz. can, \$5

USE End-o-Weed TO Spray WEEDS AWAY

• Destroys weeds, roots and all, quickly. Kills dandelion, chickweed, plantain and over 100 other lawn weeds.

Presented by
Swift



THE NONPOISONOUS WEEDONE® CRAB GRASS KILLER

Contains potassium cyanate. Highly effective, but non-poisonous to humans and animals. Kills crab grass and chickweed, without killing bluegrass, clover or other deep-rooted grasses. Clean, economical and easy to use.

6 1/2-oz. can, \$1 • 26-oz. can, \$3
6 1/2-lb. can, \$8.85

THE WEED KILLING MIRACLE

NEW IMPROVED WEEDONE®

Contains the powerful 2,4,5-T and 2,4-D

Now Weedone kills woody plants as well as dandelions, plantains and other lawn weeds, without killing grass. It kills poison ivy, poison oak, the brambles (blackberry and raspberry), honeysuckle and over 90 other woody plants. Sprayed on top and sides of tree stumps, it prevents resprouting.

The new, improved Weedone does not give off vapors that cause injury to rose bushes, tomatoes, flowers or ornamental shrubs. Harmless to humans and animals.

8-oz. can \$1 1-gal. can \$6.95
1-qt. can \$2.75 5-gal. can \$25

Weedone Plastic Applicator. Cap makes handy 1/2-oz. measure and fits any screw-top gallon jug. All plastic; no sharp metal edges to cut and scratch hands.



WEEDONE

ONLY
49¢

TRANSPLANTONE®

Hormone-Vitamin Combination
Reduces wilt and loss when transplanting

Vegetable gardeners: Cut down transplanting losses; give seedlings healthier roots. Get earlier, larger crops of tomatoes, finer cabbage, cauliflower, lettuce.

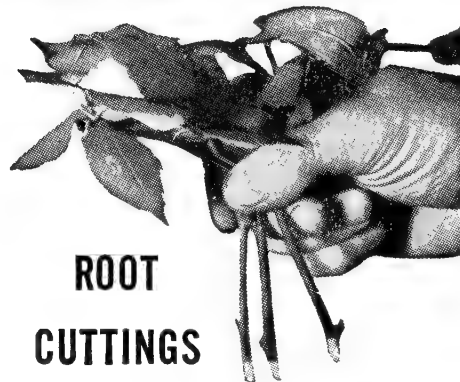
Flower gardeners: Use Transplantone when transplanting seedlings and shrubs, to get finer blooms, stronger growth.

1/2-oz. packet, 25c • 3-oz. packet, \$1
1-lb. can, \$4

DO YOU WANT LOVELIER FIRST YEAR BLOOMS? ROSETONE

Rosetone-treated plants take hold quickly and bear finer, earlier roses. Indispensable for the rose lover. Use Rosetone to soak bare-rooted plants before setting out, and to water established bushes.

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CUTTINGS

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POWDER



This hormone powder produces better roots—faster! Simply dip moistened stems in Hormodin Powder and place in usual propagating medium. For house, garden, and greenhouse plants use Hormodin Powder No. 1; also available as Powder No. 2 for woody types, and Powder No. 3 for evergreens.

Ask your dealer today for the Combination Package (Powder No. 1, No. 2, and No. 3) packed in one carton, 75¢.

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Plant Foods and Soil Conditioners

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As is usual in seed catalogs, we must notify you that prices are subject to change without notice. We shall, of course, make every effort to maintain our listed prices.

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While prices quoted on garden seed include our shipping costs, this is not the case on our other lines. So, when ordering garden supply items by mail, please remember shipping costs are EXTRA.

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SOLUBLE FERTILIZER



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plus hormone with
eight essential
Trace Elements.
10 oz.50 ea.
22 oz. . . \$1.00 ea.
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Balanced Nutrition for-

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- *Flowers
- *Lawns
- *Houseplants
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When used as STARTER SOLUTION or NUTRITIONAL FOLIAGE SPRAY, \$1.00 size will make up to 60 gal. or 1 lb. covers 1000 sq. ft. per application.

Miller Chem. & Fertilizer Corp.
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Terra-Lite
GROWS MORE...BIGGER
...FINER FLOWERS
AND VEGETABLES

New Discovery
Transforms
Caked Top Soil
Into Airy Loam!



Terra-Lite* Vermiculite, the magic garden discovery, worked into your top soil, holds and releases air, water and plant food in just the right amounts. You'll have the finest garden you've ever had, with less toil, less watering. Use it for conditioning soil, building lawns and also for starting seeds, rooting cuttings, mulching, storing bulbs—countless other gardening uses throughout the year.

We will gladly help any user to plan wisely in using Terra-Lite. Just ask us. Come in today.

*Terra-Lite is the registered trade mark of the
ZONOLITE Company

Aluminum Sulphate—Used in creating acid soils needed for successful culture of Azaleas, Rhododendrons, etc.

Bone Meal—All-purpose fertilizer rich in nitrogen and phosphoric acid.

Driconure—Organic all-purpose plant food—with a peat moss base, pulverized for convenient use. Combines quick feeding and slow, steady release of fertilizing elements.

Hy-Gro—Extra-highly concentrated plant food, quickly soluble in water. Excellent starter solution and all-around fertilizer.

Hyponex Plant Food—Can be used in dry or liquid form; teaspoonful makes 1 gallon. Contains Vitamin B1.

Lime (Hydrated)—Sweetens sour soil for lawns, and clover. Is used as a reducer and in combination with many insecticides; for whitewash, deodorizing.

Nitrate of Soda—Very quick source of nitrogen. Hastens maturity of crops. Should not be applied until plants are well above ground.

Nutri-Leaf—The plant food that plants can absorb through their leaves. A 16-16-16 formula, with hormone and eight essential trace elements added.

Premier Peat Moss—Fine winter protection for lawns; also as a mulch on strawberry, perennial beds, roses, evergreens, etc. When incorporated in the soil, it promotes growth and supplies humus.

Plantabbs—Clean white odorless plant food tablets for indoor or outdoor use.

Rose Food—A balanced combination of organic ingredients, selected for the particular "make-up" and sequence avail-

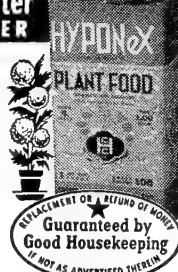
ability that roses need. Improves the color and size of your roses.

Sheep Manure—An economical and effective balanced plant food. Weed-free and rapid in its action. Supplies an abundance of humus and all the essential plant-food elements.

Super Phosphate—Aids plant nutrition and assists the plant to assimilate other ingredients. An efficient fertilizer element for lettuce, truck crops, cereal crops and alfalfa.

HYPONEX
Grows Better Plants Faster
In SOIL, SAND or WATER

Simply dissolve and water all your houseplants, garden flowers, vegetables, shrubs or lawn. Produces stronger plants, more and larger flowers and fruit. Excellent for starting seedlings, cuttings, transplants. Clean, odorless. Won't burn foliage or roots if used as directed. Contains all nutritional elements complete and balanced—plus vitamin B1—Instantly available. Results sure.



1 oz. pkt.	10c	7 oz. can.	50c
3 oz. can.	25c	1 lb. can.	\$1.00
10 lb. drum, makes 1000 gals.	8.00		
25 lb. drum, makes 2500 gals.	15.00		
50 lb. drum, makes 5000 gals.	25.00		
100 lb. drum, makes 10,000 gals.	40.00		

HY-GRO
SOLUBLE PLANT FOOD

(13-26-13)

For flowers,
potted plants,
vegetables and lawns



Brings a balanced diet right to the roots. Use according to directions on package for starter solution and transplanting. Easy to use.

3 oz. 30c—20 oz. \$1.00
—10 lb. \$4.50. Also in 25,
50 and 100-lb. sizes for
estates and larger growers.

Ask for
FREE booklet

A PRODUCT OF MCCORMICK & CO.

With PREMIER—it's
easy
to PEP-UP
your soil

Give your soil the pep it needs to grow gorgeous flowers and luxuriant grass—by adding Premier, the 98% organic, pure-sphagnum peat moss.

Premier is amazingly absorbent. It soaks up and stores moisture, air and plant food. It loosens heavy soil—gives substance to light soil. And it makes fertilizer do a better job.

Get Premier Peat Moss now—you'll know it's genuine by the blue bale head with the Certified Seal.

PREMIER
PEAT MOSS

how? when?

PLANT FEEDING

where? why?

Gardeners all know that if the soil is to feed the plants year after year, then the gardener must help the soil by supplying plant food. A large portion of the soil's native fertility is lost each year through removal of plant growth, and by erosion and leaching. Seldom is a soil to be found which has not been exhausted of one or more of the vital plant food nutrients.

Fortunately, plant feeding is a rather simple and easy job. While plants require many different elements from the soil, these can be provided by just one complete, balanced plant food, such as Vigoro. Without odor or muss, modern complete balanced plant food takes care of all the vital nutrient needs of plants, regardless of the soil's natural fertility level.

The physical condition of the soil is also important. If it is low in organic matter, if it bakes and cracks when dry, or is too sandy, it can be improved by addition of humus and conditioning materials such as peat moss, compost, and vermiculite.

A Matter of BALANCED Diet

Buying plant food for lawns and gardens is like buying food for your table. To keep healthy, you need a balanced diet . . . you would not think of keeping your children on an all starch diet just because it is cheaper. You know they need proteins and minerals, too.

It is the same way with flowers and vegetables, too. They need many different plant food elements from the soil for

root, stem, fruit or flower development. For these reasons, we recommend Complete Plant Food, which supplies in balanced proportions the vital nutrients plants need from the soil for the best growth and development.

FOR LAWNS:

Follow these 3 steps:

1. Check to see that grass is dry!
2. Apply evenly according to manufacturer's instructions. (With New Process Vigoro, you'll need only 3 lbs. per 100 sq. ft.)
3. Soak the plant food into the soil immediately after applying.

If water is not available merely work the plant food off blades of grass with back of rake. NOTE: If plant food is applied early, before growth starts, steps 1 and 3 are unnecessary. Early thaws and spring rains work the plant food into the soil.

For FLOWERS, VEGETABLES, BERRIES . . .

Apply complete plant food at the rate of 4 pounds per 100 sq. ft. of area before seeding or setting plants. For established perennials apply around plants or along both sides of row early in Spring at six to eight week intervals.

For TREES . . .

Make a series of holes 12 to 18 inches deep with a 2" soil auger or a pointed stick under the drip of the branches. Figure the plant food need per tree by

measuring the diameter four feet from the ground and allowing 3 pounds of complete plant food per inch of diameter. Fill holes with a mixture of half plant food and half soil or sand.

TWO MORE GARDENING TIPS

Good cultural practices call for keeping weeds out of your lawn and garden.

In the garden, you will have to use the hoe. In the lawn, however, you'll find it simple and easy to spray weeds away with a modern weed killer, such as End-o-Weed, which kills over 100 kinds of weeds without harming ordinary lawn grasses.

Finally, you must keep insects and fungus disease under control. We have a complete line of insecticides. If you have a large area devoted to particular plants, we have the specific chemicals to economically control troublesome pests.

However, if you grow a variety of things, you'll get better results and save time and money by using an all around insecticide, such as End-o-Pest, 3-Way garden dust to prevent and control all major types of chewing and sucking insects and fungus diseases.

If you plant right, feed right, weed right and protect right . . . you'll get better results and more pleasure and benefit from the seed you buy from us.

***VIGORO is Swift & Company's trademark for complete plant food**

New Process **VIGORO** Complete Plant Food

FINEST FOR LAWNS, FLOWERS, VEGETABLES

New Process Vigoro is the result of a Swift research program aimed at making Vigoro easier to use and to assure uniform distribution of the plant food nutrients . . . the various elements are chemically hitched to each other to assure uniform feeding.

EASIER TO USE! New Process Vigoro is now easier than ever to use on

lawns. New Process Vigoro is practically dust-free. This means the particles roll off the blades readily onto the ground.

FEEDS PLANTS RIGHT! Vigoro supplies all the vital nourishment plants need from the soil for the best growth and development. Vigoro is ideal for Lawns, Flowers, Vegetables, and Shrubs.

Swift offers End-o-Pest and End-o-Weed, too!



PLANTABBS—Good for Every- thing That Grows

A Rich Meal of Nitrogen, Phosphates,
Potash Plus Vitamin B!

Feed them PLANTABBS. If you don't get lovelier plants and flowers, and a greater yield of finer vegetables, you get your money back. PLANTABBS are clean, odorless, highly concentrated PLANT FOOD TABLETS which help produce sturdy stems, luxuriant leaves, strong roots and gorgeous blooms. 25c, 50c, \$1.00, \$2.00 and \$3.50 size boxes.



**Fullon's
PLANTABBS**

PLANT FOOD TABLETS PLUS B1

Terra-Lite (Vermiculite)—Use as mulch to protect plants during winter; doesn't mat down or become soggy. In Spring, work it around base of plants as soil conditioner. Unexcelled growing medium for flats; aids seed germination, speeds root development. Also excellent for storing root crops and bulbs.

Transplantone—New Vitamin-Hormone stimulant effective in reducing transplant shock, and wilt of all kinds of plants or shrubs. Also effective in bringing about earlier maturity on tomatoes, lettuce, celery, peppers, tobacco and cabbage.

Vigoro—The complete plant food. Supplies all the elements growing things need from the soil. Because it offers such complete nourishment, Vigoro helps produce greater yields of finer flavored, more nutritious vegetables. Produces lovelier lawns and flowers. Clean and odorless.



Ask us about PLANT FEEDING

The difference between a good lawn—or garden—and a poor one, more often than not, is A MATTER OF FEEDING. The best grass in the world can't give you a good permanent lawn unless the soil is fed, regularly and correctly. Same way with flowers, vegetables, shrubs, trees.

We want to help

That's why we say, "Talk it over with us!" We don't just sell plant foods. We want to help all we can to make sure you get results.

Whether it's window box or a hundred acres to be fed—we have the right food and the "know-how" and the desire to help!

Plant Feeding —simplified

FOR LAWNS: Follow these three steps, (1) Check to see that grass is dry! (2) Apply evenly 4 lbs. of our all-around plant food per 100 feet of area, either with a spreader or by hand. (3) Soak plant food into the ground immediately after applying. If water is not available merely work the plant food off blades of grass with back of rake. NOTE: If plant food is applied early, before growth starts steps 1 and 3 do not apply. Spring rains work the plant food into the soil. A light feeding three times a year—early Spring, early Summer and Fall—will give a thick carpet of grass.

FLOWERS, VEGETABLES, BERRIES: Apply plant food at the rate of 4 lbs. per 100 square feet of area before seeding or setting plants. For established perennials apply around plants or along both sides of row early in Spring and at six to eight week intervals.

FOR TREES: Make a series of holes 12 to 18 inches deep with a 2" soil auger or a pointed stick under the drip of the branches. Figure the plant food need per tree by measuring diameter four feet from the ground and allowing 3 lbs. of plant

Hotkaps*
FROST CAN'T HARM PLANTS
FLOWERS & VEGETABLES 3 WEEKS EARLIER!

Give your favorite flowers and vegetables an earlier SAFE start! GLASTEX HOT-KAPS provide individual HOTHOUSES for seedlings and for young plants, give positive protection against frost, storms, sun, insects.

†GLASTEX specially processed material Reg. U. S. Pat. Off.

BIG GARDEN PACKAGE of 25 only 95¢—Satter Free
Larger Pkgs. of 100, 250, 1000 for Commercial Growers

'TWIST-EMS'*

Handy! Speedy! PLANT TIE

Strong, dark green "invisible" tapes with wire reinforcing—protect stems, speedily and permanently support annuals, perennials, vines, shrubs, and vegetables.

Box of 200, 4-inch size, 25¢. Box of 100, 8-inch size, 25¢.
Box of 100, 16-inch size, 50¢. Pkg. of 50, 8-inch size, 15¢.
Pkg. of 35, 8-inch size, 10¢. 250 ft. continuous roll, \$1.00.

TRAIN-ETTS*

Ideal support for SWEET PEAS, GARDEN PEAS, POLE BEANS, CUCUMBERS, TOMATOES Hung in 5 minutes. Doesn't rot like string, nor burn tendrils like wire. 3 sizes.

60-inch x 72-inch, 65¢
60-inch x 96-inch, 85¢
60-inch x 180-inch, \$1.25

food per inch of diameter. Fill holes with a mixture of half plant food and half soil or sand.

FOR ACID-LOVING PLANTS: Rhododendrons, Azaleas, Camellias and similar acid-loving plants must have regular fertilizing if they are to remain healthy and produce the best, most brilliant bloom. Most fertilizers, however, do not contain the right elements for these plants or may have an abundance of lime that is highly injurious to them. **We have plant food designed especially for acid-soil plants. Ask us about it!**

How . . . When . . . Where in INSECT CONTROL

A leading entomologist recently said, "Progress in the last three years in development of insecticides has been greater than in the previous fifty."

The great sensation of the insecticide field has, of course, been DDT. It can now be said that DDT has fully lived up to its early promise of help for the home gardener. It has rightly been credited with miraculous results in many serious situations.

However, it must be remembered that DDT is not a cure-all. No single insecticide can ever take care of every situation.

Chlordane, the new wonder

Now comes another widely heralded new chemical miracle for the gardener—chlordane (also known as 1068). And again the results are living up to the early promises. Chlordane must now be recognized as a great new weapon in the battle with the insects.

But Chlordane, like DDT, is not a cure-all. Remember, therefore, to consider it as just one more tool for the gardener—a highly valuable tool, but not a universal remedy.

What will chlordane do?

It is highly effective against grasshoppers and the American cockroach, Colorado potato beetle, squash bug, and some aphids. It is very effective on ant nests. It is the fastest working chemical yet found against Japanese beetle grubs in soil, killing 2½ times faster than DDT.

Further experience probably will increase the list of victories for Chlordane.

Meanwhile, we suggest that you begin to use this newcomer, while keeping on with DDT for the purposes it serves best.



Identify your insects!

Biting or Chewing insects such as beetles, caterpillars, grasshoppers, and the like, can best be controlled by the application of poisons to the plants upon which they feed.

Sucking Insects such as aphids, weevils, leaf hoppers, etc., insert their beaks into the leaves, stems or fruits and suck the plant juices. Hence "stomach" poisons applied to the surface of the plant will not kill them. They must be killed by use of contact poisons.

Scale Insects that develop protective coverings are most easily killed by strong corrosive solutions, such as a concentrated lime-sulphur mixture, applied during late fall or winter when foliage is off the plants—and by other materials.

SMITH Sprayers and Dusters



BANNER Compressed Air Sprayer

Full 4-gallon capacity, extra heavy metal with embossed graduated marks for measuring liquids. Open Top tank, for quick, easy filling and cleaning—or Funnel Top. Heavy seamless brass pump with brass check valve. Non-clog automatic nozzle with new trigger control for spraying at any angle. Size 26½" by 7½". Wide and adjustable shoulder strap with snap ends. Galvanized or Copper tank.

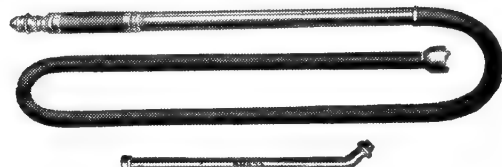
Smith Jim-Dandy Cart Sprayer

Wheels easily over smooth or rough ground. 5-gallon capacity, 5½" funnel top opening for quick filling and cleaning. Tank heavy Armco corrugated steel, size 21" by 8½". Nozzle has trigger control—instantly adjustable for style or length spray desired. Heavy seamless brass pump, with brass air check valve.



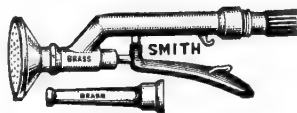
BLIZZARD Continuous Sprayer

Streamlined polished copper tank and brass barrel. Most attractive and best-selling continuous sprayer made. Brass nozzle for fine spray straight ahead or at any angle. Full quart (39 ounces) or Pint size.



SPEDEX Brass Spray Pump

The sprayer with a thousand different uses—anything from close-up spraying of plants to spraying tall trees. Operates from a bucket, barrel or tub containing your spraying solution. Handles insecticides, disinfectants, whitewash or cold water paint. Washes windows, automobiles, etc. Wonderful for fighting fires. Instantly adjustable to coarse spray, fog-mist or long distance.



AQUAMATIC NOZZLE

Newest and best garden hose nozzle. Wonderful for spraying lawns, flowers, also for washing automobiles, windows and sidewalks. Screws on to any garden hose coupling, wastes no water. Manufactured only by D. B. Smith & Company.

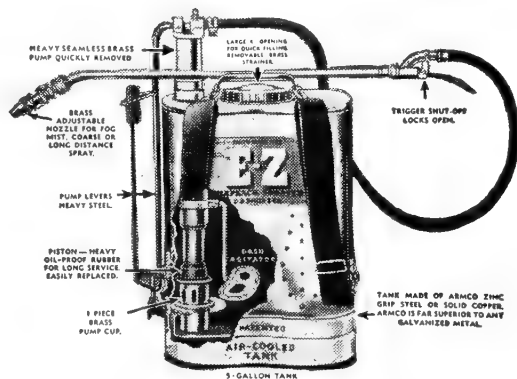


147 Adjustable Nozzle

Precision built, solid brass, all-purpose nozzle. Screws on any compressed air sprayer, barrel spray pump, or Indian Fire Pump. Combines functions of several nozzle styles.

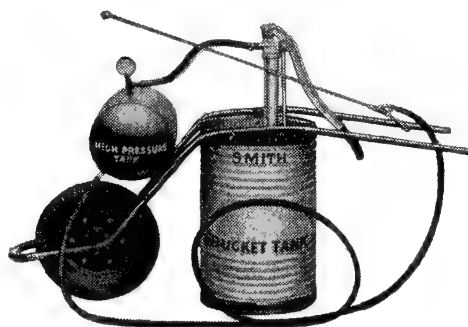
New E-Z Knapsack Sprayer

Maintains continuous high pressure with only slow easy pumping. Pump entirely of brass. Best grade, high pressure hose, 2-foot brass extension pipe with adjustable brass nozzle for all kinds of garden spraying, including high trees, white-washing, disinfecting, etc. Form-fitting ventilating tank, keeping the back dry and comfortable. Carrying handle; and dasher type agitator which keeps liquid thoroughly mixed. Solid copper tank or Armco zinc-grip steel 5-gallon tank.



Smith Wheelbarrow Sprayers

For use in spraying orchards, garden truck, vineyards, field crops, flower beds and lawns; greenhouse work; for spraying whitewash, cold water paints, disinfectants and for general spraying purposes. Capacity 18 gallons. All-brass working parts. Mechanical agitator. Pressure tank made of 300-pound tested steel plate, capacity 5 gallons. Brass pressure gauge. Equipped with 12-foot ½-inch high pressure hose, 2-foot brass extension rod and non-clog new trigger control, brass automatic shut-off nozzle. Steel wheels or pneumatic tires with or without pressure tank, as specified.



Garden Supplies and Tools

If you want to **ENJOY** your gardening . . . if you want **better results with less effort** . . . we can help you in many ways. We know just which of the new "gadgets" are really good. Our selection of garden-aids is sound, and sensible. We choose each item for improved results or saving of effort.

Many of your garden chores can be made much easier—if you use the new, improved garden tools.

Modern designers have discovered numerous ways to improve the old tools—to make the work easier and to improve results. We have these newer tools for you, together with a good assortment of the standard designs. Next time you're in our store, be sure to look them over!

GARDEN GLOVES

Garden Gloves—Protect your hands—wear gloves in your garden! Canvas or leather, in sizes for men and women.

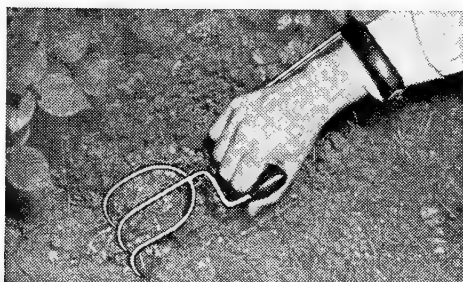
GARDEN HOSE

Visit Our Store for our newest offerings. Garden hose is now available in good quality and quantity.

LABELS

Pot or Garden Labels (Wooden)—Used for marking plants in pots or seed flats. 4 inch, 12 inch.

Wood Tree Labels, Wired. Painted wooden labels equipped with wires, for marking trees or shrubs; also used extensively for labeling dahlia tubers.



COMFY CULTIVATOR To cultivate in comfort!

Here's a cultivator you don't have to grip for dear life! Just hold it easily . . . move it with a gentle arm motion! In half the time—give your garden that real hand cultivation it needs for luxuriant growth. No cramped fingers, no blisters, no strained wrists. Comfy's exclusive foam rubber padded arm rest does the trick! \$2.95.



NATURAIN From 2-inch trickle 25-foot spray, at will!

April showers anytime of year—with this marvelous new method for watering lawns and gardens. No constant shifting . . . no water waste. Connects in a jiffy. Comes in 5 foot units, weight only 12 oz. Use 5 ft. to 30 ft., according to size of your garden. Primary unit, \$2.95; extension units \$2.75 each.

PLANT BANDS

Square bands hold almost twice the number of plants as round pots of the same size. 2 in. size, packet of 30, 25c. (Ask for prices on larger sizes and quantities.)

PLANT SUPPORTS

Bamboo Stakes—Green, pencil-thickness. 2 ft., 3 ft., 4 ft.

Dahlia or Garden Stakes—Wooden—Painted green. Strong and durable. Almost rot-proof. Will last several seasons. For supporting dahlias, young trees, etc. 4 ft., 5 ft., 6 ft.

POTS AND SAUCERS

Standard Earthen Flower Pots. Many sizes, from 2½ in. to 12 in. diameter.

Earthen Flower Pot Saucers. 3 in. to 12 in.

Red Paper Pots. Excellent for growing seedlings or for packing plants for shipment. 2½ in. to 6 in. diameter.

BIRD HOUSES AND FEEDERS

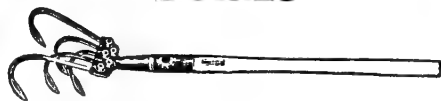
Window Bird Feeders—Provides an opportunity to study your bird companions from your window. Ideal for shut-ins and a real companionship for any bird lover.

Bird Houses—A great deal of pleasure can be derived from the birds that will be attracted to your yard by putting out a bird house or two. We carry many types and styles for bird lovers to choose from.

WILD BIRD SEED MIXTURE

Feed your feathered friends the year round with this tempting mixture. All types of wild birds relish this seed. Don't forget to give them plenty in the winter months.

TOOLS



Cultivators, Speedy — 4 sharp curved tines, 4½ ft. handle.

Norcross—Adjustable steel teeth.

Hand Cultivator Weeders—3 or 5 prong.

Forks, Spading—4 tines, D handle, light and heavy weight.

Hay Fork—Bent handle, 3 or 4 tines.

Hooks, Grass (Sickles)—Various styles, well balanced designs. Wood handles.

Potato Hooks—4 broad tines, tumbled.

Shears, Grass—Pinch-proof handles.

Hedge Shears—8 or 9 in. blades.



Hoes, Field or Garden—Various styles.

Onion Hoe—Square top pattern.

Scuffle Hoe — 8 inch blade; straight handle.

Warren Hoe—Pointed steel head.

Knives, Asparagus—10" with V-shaped point.

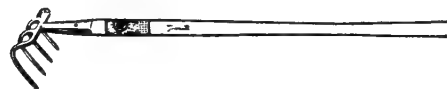
Budding, Propagating and Pruning Knives. See our selection.

Edging Knife.—Half-moon blade.

Scythes, Grass, Weed and Bush—Best crucible steel. Visit our display!

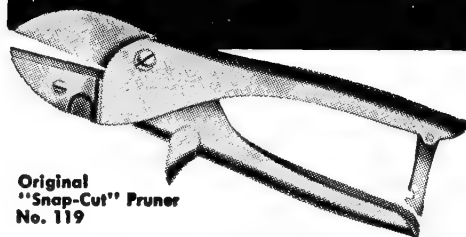
Shovels, Square Point—Long and D handles.

Round Point Shovel—Long D handle.



Rakes, Steel, Curved Tooth—Straight handles; teeth on head ¼" thick.

WORLD'S FINEST PRUNER



Original "Snap-Cut" Pruner No. 119

THE "SNAP-CUT" IS THE HOME GARDENER'S HANDIEST TOOL

Razor sharp blade acts on a soft, non-dulling metal anvil. Cuts tough, ¾" branches with amazing ease. Though imitated throughout the world, the "Snap-Cut" Pruner has never been equaled. Your dealer will tell you "Snap-Cut" tops them all.

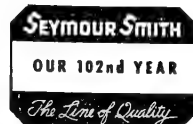
"EZY-CUT" GRASS SHEARS

HEDGE SHEARS



Smooth working, easy cutting. Makes trimming lawn edges easy.

Made like a tailor's scissors. So balanced, they're almost effortless to use.



Other famous Seymour Smith tools — saws, lopping shears, tree trimmers, etc. — will all help make your gardening easier.

Steel, Straight Tooth Rakes—Level head.

Wood Rakes—Rigid and strong.

Bamboo Rakes—Fan shaped, strongly made.

Steel-Broom-Rake — Flat, spring-steel teeth.

Pruners, Tree—8 ft., 10 ft., 12 ft.



Pruning Shears—Again available in several styles.

Flower Gathering Shears—They cut the stem and hold the flower for you.

Spades, Square Point—Flat Blade, D handle.

Trowels—All-Steel Garden—Made of one piece of rigid steel; shaped ventilated handle.

Transplanting Trowel—6" blade of solid steel.

Weeders, Hand—3 steel prongs; short handle.

Lawn Weeder — Curved forged-steel blade.

Weeder and Hoe Combined—A labor saver.

Dandelion Weeder—V-shaped design.

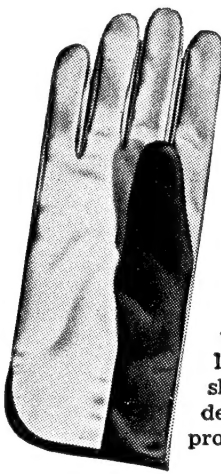
PRICES

subject to change

As is usual in seed catalogs, we must notify you that prices are subject to change without notice. We shall, of course, make every effort to maintain our listed prices.

GARDEN SUPPLY PRICES NOT PREPAID

While prices quoted on garden seed include our shipping costs, this is not the case on our other lines. So, when ordering garden supply items by mail, please remember shipping costs are EXTRA.

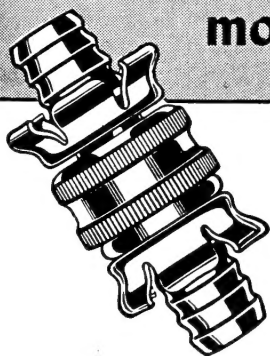


"Green Thumb" ®

They really do have a green thumb and they're vinyl - impregnated to keep out dirt, wear several times longer, wash without shrinking. Every gardener needs a pair to protect her hands.

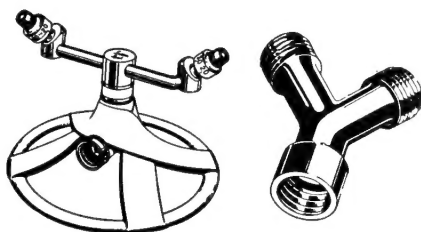
Sizes small, medium and large **89c**

Repair hose easier . . . water
lawns and gardens
more efficiently...



Replace couplings . . . couple a length of hose . . . mend leaky hose with GREEN SPOT'S Dura-Seal couplings and menders. Exclusive "dip-shaped" clinching fingers and king-size shanks give tighter, leakproof seal on rubber or plastic hose. Made of brass with rustproof steel fingers.

You'll find just the accessories you want in the GREEN SPOT line . . . from the WEATHER-MATIC, queen of automatic sprinklers, to hose nozzles, special sprays, connectors, etc.
Just ask for GREEN SPOT.



Green Spot
KEEPS THAT SPOT GREEN
A PRODUCT OF SCOVILL

GARDEN HOSE ACCESSORIES

Sprinklers Quick Connectors Hose Menders
Hand Sprays "Y" Connectors Clamps
Hose Nozzles Couplings Goosenecks

GARDEN AIDS by PORTCO



Shiny aluminum strips crackle and flash. Keep birds or animals away day and night. Lasting protection for gardens and farms. Simple to use. Ask your dealer or order direct.

10 Strips to a package\$.25
Commercial pack of 100 strips\$1.80



FOR QUICK TYING

PORTCO CINCH-TIES are Wire Center Plant ties.

Durable and attractive green color. In 8-inch lengths or handy ball of 250 and 500 ft. Cut to desired lengths for quick tying. For flowers, vines, annuals.

100 8-in. for.....\$.25
250 ft. for.....\$1.00
500 ft. for.....\$1.75

Inquire about bulk put-ups.
SEE THEM at our store



WEATHERIZED!

NO SHRINK • NO SAG!

Durable, extra strong PORTCO Garden Twine is specially treated for weather resistance . . . lasts more than a full season . . . no shrink or sag. The ball is wound for convenient center pull...will not unravel.

250 ft. for 30c
500 ft. for 50c

SEE THEM at our store





INSECTICIDES & FUNGICIDES

All-Around Spray (Acme)—Multi-purpose formula for roses, shrubs, fruit trees. This one spray does the job. (See Acme display for full data.)

Antrol Traps—Kills both sweet and grease eating ants.

Arasan (Seed Treatment)—An effective dry seed disinfectant and protectant for destroying surface seed-borne organisms and protecting the seed against soil-borne organisms responsible for seed decay.

Arsenate of Lead—Controls practically all leaf-eating or chewing insects.

Black Leaf 40—Nicotine Sulphate 40% solution for controlling aphids (plant lice), thrip and soft bodied sucking insects.

"Black Leaf" Aerosol Insect Killer—The new pushbutton aerosol that rids your home of insects.

"Black Leaf" Garden Dust—A multi-purpose dust or spray containing nicotine, pyrethrum and rotenone—plus a concentrated fungicide.

"Black Leaf" Rotenone Dust—1% rotenone and 10% sulphur blended on special carrier material.

Black Leaf 40 Mosquito-Fumer—New outdoor mosquito killer. Effective "smoke aerosol" deadly to mosquitos.

Bordeaux Mixture—Standard copper insecticide for controlling black spot, mildew, blight, other fungus diseases.

Calcium Arsenate—Cheap quick-acting poison for potato bugs; leaf-eating insects.

2% Ceresan (Seed Treatment)—Reduces seed rotting and damping-off gives more uniform stands with less seed.

New Improved Ceresan (Seed Treatment)—Kills seed-borne diseases, such as root-rot and seedling blight, by both contact and vapor. Use on barley, oats, wheat, rye, sorghums, flax, peas, cotton.

Chlordane Dust (Acme)—The new control for a large group of insects in the lawn, garden, and indoors. See below for list of pests it will kill.

Duradust—A ready-to-use dust for home gardens, contains 5% DDT and 9% metallic copper. Particularly effective on rose chafer, leaf hopper and corn ear worm.

End-O-Pest (Swift's)—All-around garden dust in a refillable sprayer package which sprays or pours.

NEW!
**POMO-
GREEN**

FOR ROSES and other flowers

An improved formulation, effective at all temperatures. A leaf-green dust or spray that controls black spot, mildew, rose chafer, aphids and many other chewing and sucking insects on roses, other flowers and ornamentals.



**KOLO FRUIT
TREE
DUST or SPRAY**

An efficient and safe insecticide-fungicide combination for small fruit growers. Protects against the most injurious insects and fungus diseases on Apple, Pear, Peach, Plum and Prune trees.

**C-O-C-S
COPODUST
A DUSTING FUNGICIDE**

Use to control early and late blights on tomatoes, potatoes, celery and other fungus diseases on many vegetables.



**FREE! DUST AND
SPRAY GUIDE**

Tells where, when and how to use Niagara Farm and Garden Brand protective chemicals. Write us or ask your dealer.



Niagara

FARM AND GARDEN BRAND
Insecticides and Fungicides

NIAGARA CHEMICAL DIVISION
Food Machinery and Chemical Corp.
Middleport, N. Y.



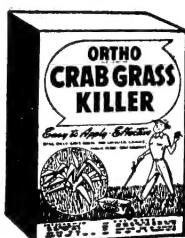
IT'S EASY TO PROTECT YOUR GARDEN AGAINST PESTS



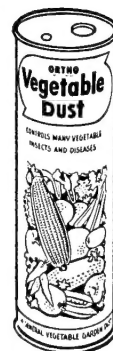
BUG-GETA Pellets — Kills Snails, Slugs, Cutworms—handy, easy to use. Economical metaldehyde-arsenical bait in pelleted form. These pellets are easy to distribute in "hard to reach" areas. They go 4 times further and hold up longer than old style meal bait.



Apply **ISOTOX** Garden Spray, a multi-purpose insecticide containing amazing Lindane, with the handy **SPRAY-ETTE**, which gives the proper dilution while attached to garden hose.



ORTHO Crab Grass Killer —Kills ugly crab grass (watergrass, wiregrass, or fallgrass) in lawns. An easy to apply dry compound. Won't harm desirable grasses when properly used.



Protect your vegetables and fruit from insects and fungus diseases with **ORTHO Vegetable Dust** and **ORTHO Home Orchard Spray**. No harmful residue or taste from these versatile products.



ORTHO-GRO—New liquid plant food for quick growth and long lasting effect. Contains organic fish in balanced fertilizer. Economical—only 2 teaspoons **ORTHO-GRO** per gallon water.

TM'S ORTHO, BUG-GETA, ISOTOX, REG. U.S. PAT. OFF.



CALIFORNIA SPRAY-CHEMICAL CORP.

Paris Green—For control of chewing insects, particularly potato bugs.

Red Arrow Garden Spray — Contains Pyrethrum, Rotenone, Soap. Harmless to animals.

Red Arrow Dust—Use as spray or wash for fruits, flowers, vegetables.

Special Semesan (Seed Treatment)—Effective in preventing and controlling both brown patch and dollar spot. Provides wide margin of safety with little danger of yellowing or thinning turf when applied.

Semesan Bel—For use on potatoes. Controls many seed-borne diseases.

Lime Sulphur, Liquid—A dormant spray material against scale of all kinds.

Lime Sulphur, Dry—A dormant spray to kill scale or use as a summer spray for control of fungus disease.

Mildew Spray—Strong liquid spray for control of mildew, leaf spot and black spot on rose bushes, flowers.

RED ARROW

GARDEN SPRAY

Non-poisonous. Kills most chewing and sucking insects quickly, safely. 1 oz. makes several gallons of spray.



1 oz., 4 oz., and 1-pint bottles

Ask for free booklet
"It's Easy to Control Garden Insects"
A PRODUCT OF **MCCORMICK & CO.**
Baltimore 2, Md.

RED ARROW

AGRICULTURAL DUST

**3/4%
ROTENONE!**



Non-poisonous—spray or wash. Kills bean beetles, cabbage worms, etc. Dust about every 10 days.

**2-lb. and 5-lb. packages
(1% Rotenone in 50-lb. drums)**

A PRODUCT OF **MCCORMICK & CO.**
Baltimore 2, Md.

BLACK LEAF 40®



One ounce of **Black Leaf 40** makes six gallons of spray which protects your garden and orchard from infestation by aphids, leafhoppers, most thrips and other soft-bodied sucking insects. It kills these pests two ways — by contact and by fumes.

Black Leaf 40 spares bees and other beneficial insects... never stains or burns and leaves no unsightly or objectional residue on flowers, foliage or fruit. Also keeps dogs away from shrubbery when used as directed.



Controls most chewing insects, sucking insects and fungus diseases. Packed in cartridge-refillable dust guns or spout pouring cannisters. Use with confidence on edible fruits and vegetables. Made by Swift, maker of Vigoro, it's

**THE PROTECTION
ALL GARDENS NEED**

ACME GARDEN DUSTS AND SPRAYS



ACME 5% LINDANE SPRAY

New super-killing insecticide

Extra satisfaction in killing insects with this new super killing insecticide for fast control of aphids, thrips, plant bugs, caterpillars and most all common beetles and bugs infesting azaleas, roses, other flowers, shrubs, vines, fruits and vegetables. Kills three ways, by contact, with vapors and as an internal poison. 1 pt. \$2.70 ea. 4 oz. \$.80 ea.

ACME 6% CHLORDANE DUST

Easy does it, simply sift on lawns and in the garden for controlling ants, lawn moths, chiggers, cutworms, earwigs, grubs or work into gardening soil for wireworms, grubs, root maggots. Excellent for spotting along baseboards, or crevices in homes to eliminate unwanted ants, cockroaches, silverfish, crickets and box elder bugs. 1 lb. sifter carton \$.60 ea. 4 lb. bag \$1.50 ea.



ACME ALL ROUND SPRAY



For the gardener who cares, All Round Spray gives highest degree of protection to flowers, fruit trees, shrubs and vegetables from ravages of insects and blight. Combining two insecticides and two fungicides, if used regularly, one or more of the active elements are always at work. 1 lb. \$1.10 ea. 4 lb. \$3.50 ea.

ACME TOMATO DUST



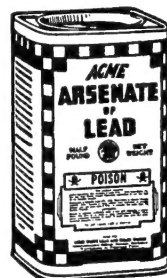
Many common spraying and dusting materials are irritating to tomato plants, causing rapid respiration so that they lose moisture more quickly than the plant can replace. Acme Tomato Dust is especially formulated for tomatoes, controlling blights and worms and permitting best possible harvest. 1 lb. sifter \$.60 ea. 4 lb. bag \$1.50 ea.

ACME LIME SULFUR (DRY)



Containing 65% Calcium Polysulphides, it is a very valuable spray against many insects as well as some important fungus infections. It is a favorite spray in control of scale, mites, peach leaf curl, mildew on fruit trees, berry bushes, and as clean-up spray on roses. 200 lb. bag \$48.00 ea. 100 lb. bag \$25.00 ea. 5 lb. can \$2.50 ea. 1 lb. can \$.60 ea.

ACME ARSENATE OF LEAD



Thoroughly reliable in killing eating insects which destroy foliage and attack fruits. Safe to use on tender foliage. When worked into lawns and other turf, grubs, worms, etc. are killed and the turf "proofed" against insects for some years. Treatment discourages germination of crabgrass seeds. 1 lb. ctn. \$.70 ea.

ACME GARDEN GUARD

America's favorite rotenone dust for vegetables and flower gardens. Safe to use on edible portions of plants right up to picking time. Kills most common garden insects of both sucking and leaf chewing types. No mixing, no muss—shake from sifter package hitting insects to be controlled. 1 lb. sifter \$.50 ea. 4 lb. sifter \$1.00 ea. 1 lb. pump gun \$.65 ea.



Old favorites and new in a wide

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FLORIBUNDAS

Donald Prior
Goldilocks
Fashion
Pinocchio
Betty Prior

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Aloha
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Blaze
Paul's Scarlet

PATENTED HYBRID TEAS

Crimson Glory
Mirandy
Capistrano
Katherine T. Marshall
Show Girl
Eclipse

Gordon Eddy
Mission Bells
Mme. Henri Guillot
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Peace
Sutter's Gold

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A superb selection of fine roses

range of beautiful hues.